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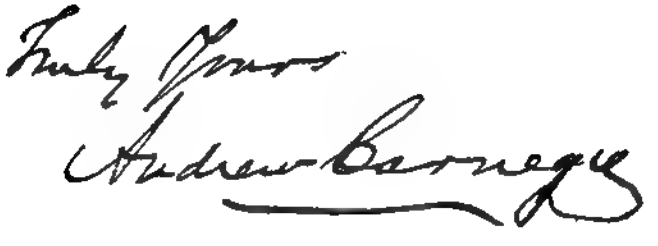

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THE CARNEGIE MUSEUM

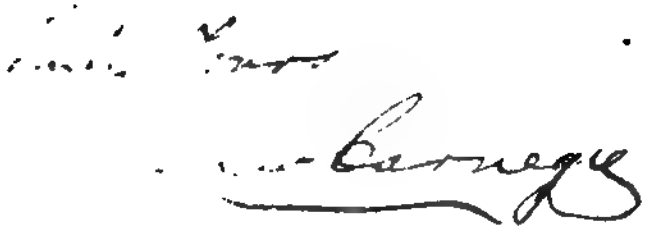
PITTSBURGH

ANNUAL REPORT OF THE DIRECTOR

FOR THE

YEAR ENDING MARCH 31, 1898.

1898



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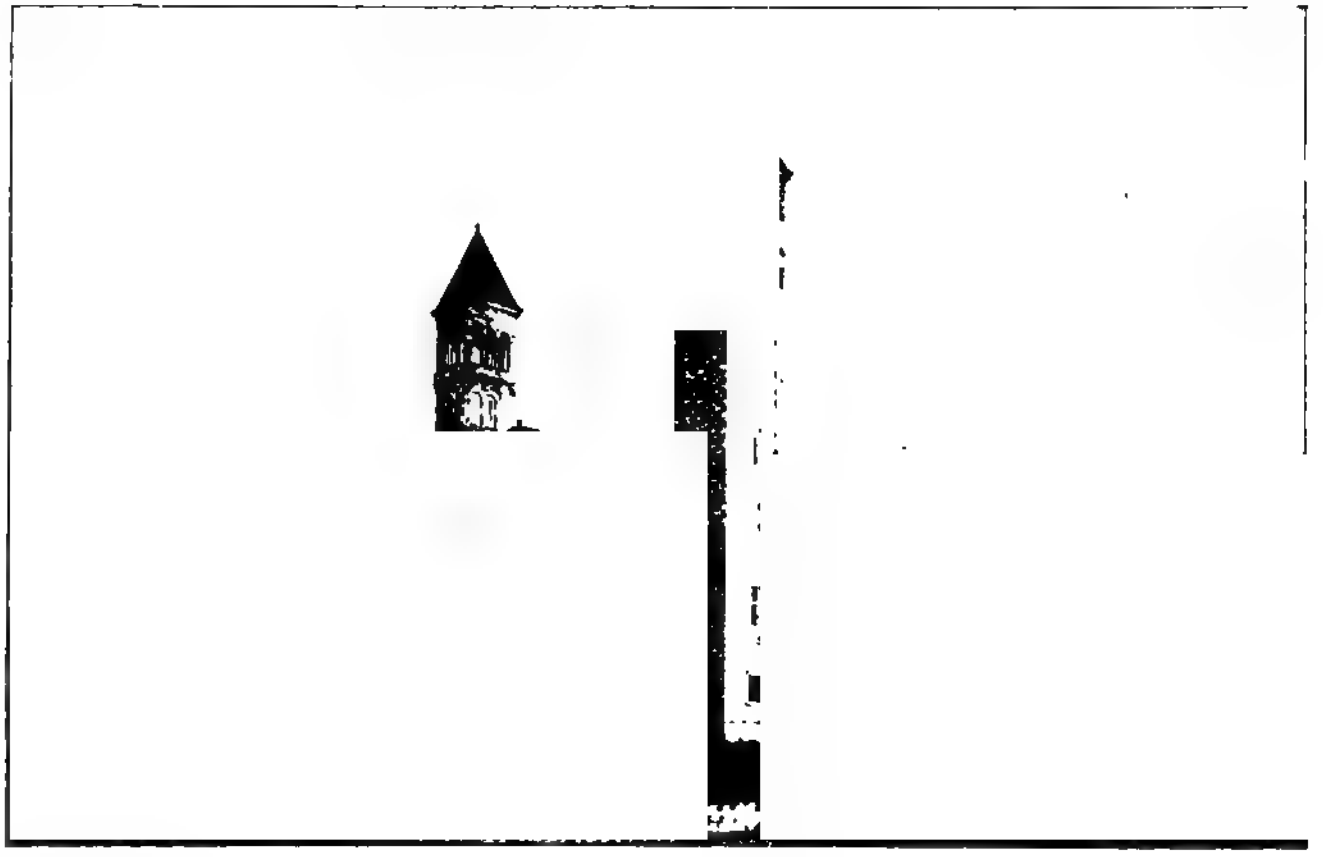

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1897-1898.

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John A. Brashear,
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Rev. W. J. Holland,*
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Hon. Henry P. Ford.

DIRECTOR.

W. J. HOLLAND, Ph. D., LL. D., etc.

*Resigned March, 1898, to assume the Directorship of the Museum.

LETTER OF TRANSMITTAL.

MR. C. C. MELLOR,

Chairman of the Committee on the Museum of the Board of Trustees of the Carnegie Fine Arts and Museum Collection Fund.

DEAR SIR :—I have the honor herewith to submit to you my first annual report as Director of the Carnegie Museum. The period of my connection with the Museum as its Director has been so brief that it might almost seem idle for me to attempt a report at this time, but having been until recently a member of the Committee of your Board which has had charge of the Museum, I have been familiar with everything which has occurred since the beginning, and therefore feel less hesitation than would otherwise be the case.

Acting upon your suggestion I have decided to incorporate in this first formal report a brief account of the entire activity of the Museum during the time which has elapsed since its public inauguration, accompanied by certain suggestions as to the future.

To this statement I append a list of all the accessions which have taken place, whether as purchases, gifts, or loans. I also attach to the report financial statements covering the operations of the Museum since the beginning.

Trusting that the report which I have the honor of submitting through you to the Board of Trustees may serve to convey to that body all the information which they may desire to possess in regard to this important department of the institution, I have the honor to be,

Very respectfully,

W. J. HOLLAND,

Director.

Carnegie Museum, April 1st, 1898.

REPORT UPON THE CONDITION AND PROGRESS OF THE CARNEGIE MUSEUM IN PITTSBURGH,

Submitted April 1st, 1898,

BY W. J. HOLLAND, DIRECTOR.

HISTORICAL.

In the year 1881 Mr. Andrew Carnegie proposed to the city of Pittsburgh to build at his own expense and present to the municipality a public library. His offer, which was most generous in its character, could not be immediately accepted by the city because of certain legal impediments, which required for their removal legislative action by the Commonwealth of Pennsylvania. In 1887 legislation was enacted, which opened the way for the acceptance of the munificent proposal, which had been made by Mr. Carnegie. In 1890 with princely generosity he renewed his offer to the city, quadrupling the amount which he had previously offered to give, naming one million of dollars as the sum which he desired to devote to this purpose. In the letter making this noble offer to the city he provided that in connection with the edifice erected to accommodate the library there should be provision made for a Music Hall, an Art Gallery, a Museum, and rooms for the accommodation of the various learned societies composing the Academy of Science and Art of Pittsburgh, or affiliated with that institution. On November 5th, 1895, the edifice was publicly dedicated to the use of the public with ceremonies appropriate to the occasion.

The splendid generosity of the gift had produced a profound impression upon the people, but their gratitude was converted into amazed thankfulness when upon this memorable occasion the donor announced his intention of supplementing his gift by the bestowal of an additional million of dollars as a permanent endow-

ment, the annual income to be used in promoting the interests of the Art Gallery and Museum. The custodianship of this endowment was committed to a Board of Trustees, consisting of the gentlemen who were already vested with the care of the original gift of the building, and eighteen others, who were named by the donor, because of their known interest in those things which tend to the scientific and æsthetic culture of the community. The formal title assumed by this body is "The Board of Trustees of the Carnegie Fine Arts and Museum Collection Fund."

The first meeting of the new Board was held on January 2d, 1896, at which time an organization was effected. A constitution and by-laws for the government of the Board were subsequently adopted. Under the provisions of the by-laws the control of the Museum was placed in the hands of a Committee of the Board, consisting of eight members. This Committee as first constituted was composed of the following gentlemen: C. C. Mellor, Chairman, S. H. Church, John A. Brashear, Rev. A. A. Lambing, Hon. H. P. Ford, Josiah Cohen, Esq., Chancellor W. J. Holland, and W. N. Frew, Esq., President of the Board, *ex-officio*.

The first meeting of the Museum Committee was held on March 31st, 1896, at the office of Mr. C. C. Mellor. An organization was effected, and Col. S. H. Church was elected as Secretary.

Prior to the opening of the Museum on November 5th, 1895, arrangements had been made by the Academy of Science and Art of Pittsburgh to gather together a display of objects suitable for exhibition in a museum. A number of specimens were donated to the Academy and a still larger number of objects were kindly loaned for this purpose. The Curator of the Academy, Dr. Gustave Guttenberg, had labored strenuously to place the collections in proper order, and was assisted by a number of his associates, who freely gave their time and also contributed of their means to make the display worthy of the occasion. The result as a first effort was highly creditable. When the Museum Committee of the newly constituted Board took charge of the work entrusted to it, a considerable portion of these collections was still in the Museum. Negotiations were entered into between the Academy of Science and Art and the Committee, and the former body transferred to the latter its tenure and custodianship of the collections in the Museum and was absolved from the obligation of

paying the salary of a Curator, which had heretofore been borne by the Academy. The understanding was that the funds thus released to the Academy should be employed in providing popular lectures upon scientific subjects, an understanding which has been faithfully adhered to.

The first step taken by the Committee after having come into full charge of the Museum was to select a Director and such other assistants as might be needed to carry on the work entrusted to them. Mr. Frank H. Gerrodette was chosen as Director, and Mr. Herbert H. Smith as Curator in the department of invertebrate zoölogy. A staff of volunteer assistants, comprising some of the most able and widely known scientific men in the community, was also organized. Mr. Gerrodette and Mr. Smith, the latter assisted by his amiable and accomplished wife, entered upon the work to which they were respectively assigned at the Museum in June, 1896. Other assistants were duly secured.

One of the first questions which engaged the attention of the Committee was the necessity for formulating a definite plan for the development of the Museum. It was finally resolved that it shall be the policy of the Museum, among other things, to develop a collection representative of the Appalachian region, to be gathered on the following lines:

First. The establishment of collections illustrative of the natural history and resources of the region of which Pittsburgh is the metropolis.

Second.—Collections illustrative of the early history of this region.

Third.—Collections illustrative of its pre-historic inhabitants.

Fourth.—Collections illustrative of the arts; graphic arts, textile arts, fictile arts, the arts of design, etc., as represented in this region.

Fifth.—Collections representing the materials employed in the various industries of the region.

Sixth.—Coöperation with the Academy of Science and Art, and with volunteer aids and others in frequent courses of popular scientific lectures.

A second matter of much preliminary importance, which engaged the attention of the authorities of the Museum, related to the best method of arranging and displaying the collections, which were already in their possession, and which it was contemplated

ultimately to gather. The decision of these matters was entrusted to a sub-committee consisting of Dr. Holland, Mr. Mellor, and Mr. Brashear, to act in conjunction with the newly chosen Director. The final result of the labors of this sub-committee was the formation of a general plan for the utilization of the space at the command of the Museum authorities and the adoption of certain standard styles of cases for the exhibition of specimens, in deciding upon which much assistance was derived from the authorities of the U. S. National Museum, the American Museum of Natural History, the Metropolitan Museum of Art in New York City, as well as from the well known establishment of Ward in Rochester, N. Y.

The training which Mr. Gerrodette had received had awakened in him a taste for ethnological research, and shortly after his arrival he urged the Committee to permit him to undertake the thorough examination of the large Indian mound at McKee's Rocks in the southwestern suburbs of Pittsburgh. Permission to make the necessary excavations was received from the owners of the land, and the work, which was of considerable magnitude and awakened great popular interest, was finally successfully completed. The preparation of a monograph upon the subject was entrusted to Mr. Gerrodette, which he has not yet completed. The collection of relics found in the mound is typical, and portions of it are displayed in the Museum. The work of exhumation undertaken by Mr. Gerrodette so thoroughly engrossed his time and attention that the Committee felt it necessary to come to his assistance in the conduct of the affairs of the Museum, and in view of the necessity of promptly providing a suitable exhibit for the approaching annual celebration of the establishment of the institution, Mr. Mellor and Dr. Holland were appointed a committee to ascertain what collections might be secured and suitably installed before the occurrence of the anniversary. This was done, and large and valuable collections were purchased, and Prof. Ward, of Rochester, made a most generous offer to loan very important collections to the Museum, giving the Committee the privilege of subsequently purchasing them, or returning them to him. On September 19th Mr. Gerrodette tendered his resignation as Director, and it was accepted.

The direction of the Museum was then by formal resolution placed in the hands of a sub-committee consisting of Mr. Mellor,

Dr. Brashear, Col. S. H. Church and Dr. Holland, with Mr. H. H. Smith as the Chief of Staff in control of the internal affairs of the Museum and important portions of the correspondence.

The work of arranging and installing the collections, which had been purchased and loaned, or donated, went forward rapidly, and on Founder's Day, November 3d, 1896, the Museum, which had been closed for a few weeks, was re-opened to the public. It presented a most attractive appearance, and many of the hitherto vacant spaces were permanently filled with exhibits of an instructive character. The kind donor expressed in terms of unqualified delight his appreciation of what had been done and his conviction that in this department of the great institution a most important agency for the promotion of popular culture is found. The awakened interest of the people was manifested by the throngs which crowded the building. It was definitely ascertained that during the year nearly five hundred thousand visitors entered the doors.

The appropriation originally made from the general fund to this department having been inadequate, it was supplemented in December by an additional grant of $4,000, making the sum total received for the operations of the year $12,000.

At the opening of the following fiscal year in April, 1897, a more generous appropriation was made, amounting to $20,326.31.

The importance of securing the services of a competent preparator having forced itself upon the minds of the Committee in charge of the Museum, Mr. Frederic S. Webster, one of the ablest and most widely known artists of his class, was engaged, and he entered upon his work in the latter part of the spring of 1897. The wisdom of the choice made by the Committee has been proved in many ways.

The work of the Museum has been prosecuted with increased energy and the six large apartments devoted to its use are rapidly being filled with choice collections. Among the most valuable contributions which have come into our possession are those which have been presented by the founder of the institution. In 1896 we received from Mr. Carnegie the gift of a series of reproductions of the bronzes discovered at Pompeii, together with other important but less costly gifts. In 1897 he instructed Dr. Holland to purchase such collections as he might select, and the result was the acquisition of almost an entire series of the beautiful models

made by the firms of Auzoux and Deyrolle, in Paris, together with a number of the models made by Fric, of Prague. In addition the Museum has received a number of smaller but no less interesting contributions from the same generous source.

To Mr. George Westinghouse, Jr., we are indebted for an electric motor by which power is supplied to the laboratory, thus greatly facilitating the work in the department of preparation.

A survey of the collections now contained within the Museum shows that we already have obtained in different ways the nucleus of an important assemblage of specimens.

MAMMALS.

The collection of mammals in the Museum is as yet comparatively small. The anthropoid apes are represented by a fine group of orang-outans purchased from Ward of Rochester. The gorilla is represented by a superb specimen of the skin and the skeleton obtained through Dr. Holland and collected by the late Dr. A. C. Good in the valley of the Ogové, in tropical Africa. A large number of specimens of mammalia in the skin have been acquired and remain as yet unmounted. A number of these specimens came from the collection belonging to Mr. F. S. Webster at the time he entered into the employment of the Museum, and were purchased from him by the Committee. Important additions have from time to time been made through the kindness of the Superintendent of the Parks, who has made it a rule to transfer to the Museum specimens of such animals as have died at the Zoological Garden. These have been skinned and prepared for mounting as they have been received.

From Lieut. Peary we purchased several specimens of the Atlantic walrus captured by him on his last Arctic expedition. Through the kindness of Mr. F. A. Lucas, of the United States National Museum, we also secured a fine series of fur-seals from the Pribylov Islands. All of these specimens still await preparation for exhibition.

BIRDS.

The Western Pennsylvania Sportsman's Association donated to the Academy of Science and Art its collection, composed principally of game-birds, and this collection has been transferred to the Museum. The Hon. George B. Sennett, of Youngstown, Ohio, has donated a collection of two hundred birds, some of them

quite rare and valuable, and in excellent condition. Dr. Holland has contributed a small collection of birds from tropical West Africa. From Mr. Webster a collection of over one thousand specimens was purchased. Numerous gifts of single specimens have been made by various donors. Two of the most notable groups that have been recently installed in the collection are the group of flamingoes and the group of Californian condors and turkey-buzzards, which have been set up by Mr. Webster. The latter group challenges comparison with anything of like character in the museums of this country, or Europe. It is hoped during the coming spring and summer that we shall be able to make a nearly perfect collection of the birds of Western Pennsylvania. Mr. D. A. Atkinson, of Wilkinsburg, Pa., has kindly deposited in the Museum his very extensive collection of the eggs and nests of the birds of Allegheny county, forming a very attractive exhibit. To this collection has been added a small assemblage of the eggs of sea-fowl, obtained by the Chancellor of the Western University of Pennsylvania at Handa, in Northwestern Scotland.

REPTILES AND BATRACHIANS.

The association of young people known as the Pittsburgh High-School Naturalists has deposited in the Museum, as a temporary exhibit, a collection of the reptiles of Western Pennsylvania. A number of specimens have been donated by Mr. Jacob Nease and also by Mr. Ellis Frost, the specimens taken by the latter having been collected in Vermont during the past summer. Mr. H. H. Smith, during a collecting tour to the region of the Cheat River, obtained a number of valuable specimens, and the Museum by purchase secured a few others from Florida. The specimens purchased in Florida, as well as several of those obtained by Mr. Smith, were alive, and were kept for some time at the Museum and studied by Mr. Webster, who has succeeded in making a number of casts, one of which, representing a rattlesnake in the act of striking, was made from a living specimen which was subjected to the influence of chloroform, and the cast is one of the most singularly perfect representations of the rattlesnake in this attitude which has ever been prepared.

From Mr. Carnegie we received a very large specimen of the alligator of the Southern States, purchased by him in

Florida, and from the proprietor of the Klondike Museum, Pittsburgh, a gift of a number of alligators in the flesh, which have been prepared for mounting by Mr. Webster.

The collection contains at present about fifty species of North American Reptilia and Batrachia.

FISHES.

Thus far the collection of fishes is quite small, this field having as yet been hardly touched. The Museum has received from Mr. A. K. Whitney, of New York City, a finely mounted specimen of the tarpon, taken in Florida. A number of specimens of interesting fishes have been received from other donors. One of the tasks assigned to ourselves for the coming summer is to secure, as far as possible, specimens of the fishes known to inhabit the waters of Western Pennsylvania, and we hope to be able to report a year hence that this vacancy in our collection has been to some extent filled.

MOLLUSCA.

The collection of mollusks in the possession of the Museum is already considerable, and represents nearly one-third of the species which have been named and catalogued by naturalists. We purchased of Mr. H. H. Smith an extensive collection of shells, to which we subsequently added, by purchase, the entire collection made by the late F. R. Holland, containing a large number of species which had been named and labeled by Adams, Bland, Anthony, and Lea. In addition to this contributions have been made by a large number of individuals, the most important gifts having come from Mr. S. H. Stupakoff, Right Rev. Cortlandt Whitehead, Mr. O. P. Scaife, Mr. W. P. Hanna, Mr. E. K. Morse, and Mr. Geo. H. Clapp. Important accessions to the collection have also been secured by exchange. Some sections of the collection are at present in the hands of specialists for the purpose of determination.

INSECTS.

The late Dr. John Hamilton of Allegheny, who was well known during his lifetime as one of the leading coleopterists of this country, by his will gave his entire collection of beetles, one of the largest and most accurately determined collections of its kind in the United States, together with all the literature relating

thereto in his library, to Dr. W. J. Holland, as trustee, with the request that he would place the same wherever, in his judgment, the collection would receive proper care and attention, the preference to be given to the Carnegie Museum, if at the time of his death it might be able to properly preserve and care for the collection. Acting under the instructions of the testator, seconded by Mrs. Hamilton, Dr. Holland placed the collection and library of books in the custodianship of the Museum. Dr. Holland has also deposited in the Museum his entomological collection, which is one of the largest and most perfect collections of its kind, containing the entire collection of William H. Edwards, which formed the basis of his monumental work, "The Butterflies of North America"; also the collection of Theodore L. Mead, of New York; the collection of the micro-lepidoptera of Japan, made by the late Henry Pryer, of Yokohama; the collections of the late Dr. Roessler, of Basle, Switzerland; the collections of William Doherty, made in Kumaon, Burmah, Celebes, East Java, Buru, and at Geelvink Bay in New Guinea; large collections made by the late Dr. A. C. Good and others in tropical West Africa; the entire collection made by the United States Eclipse Expedition to Japan in 1887; the collection of moths made in East Africa by Mr. A. Donaldson Smith, and many thousands of species, both of North American and exotic Lepidoptera, obtained by purchase or by exchange from collectors in all parts of the world. The collection is rich in types, of which there are nearly three thousand, named by Edwards, Lord Walsingham, Dr. A. G. Butler of the British Museum, Dr. Henry Skinner, Dr. George D. Hulst, the late Dr. Boisduval of Paris, Henry Edwards, and by the owner of the collection. There are in all over twenty-five thousand species, represented in the collection by nearly three hundred thousand specimens. In addition there are about seventeen thousand species of Coleoptera, North American and exotic, the latter principally African, and a large number of species representing the other orders of the insecta. In the year 1893 Mr. Andrew Carnegie purchased the collection known as the Knyvett Collection of Lepidoptera, one of the most extensive collections of Indian lepidoptera which has been made. This collection was in the custodianship of Dr. Holland after its purchase, and was turned over to the Museum shortly after it was opened. In addition to these collections the Museum has obtained a large series of

specimens of the insects of Allegheny county, representing various orders. All of these accumulations of entomological treasure, some of which have high scientific value, require labor to bring them into such condition as to make them thoroughly useful for purposes of reference; but foundations have been laid for one of the most important and valuable collections of its kind in the United States.

CRUSTACEA.

The collection of Crustacea is still small, but includes a number of valuable specimens, principally obtained by purchase from Ward, of Rochester, among these purchases being a singularly fine example of Macrocheirus Kæmpferi, and specimens of ten or twelve others of the larger species of the group to which this creature belongs.

MARINE INVERTEBRATES.

A large collection of Corals from the Great Barrier-Reef of Australia has been purchased from Ward, and a number of Echinoderms have been obtained from various sources. The collection of marine invertebrates is, however, as a whole, quite in its infancy.

PALÆONTOLOGY.

The palæontological collections are as yet comparatively small, but a good beginning has been made by the acquisition of several large series of fossils and casts of fossils purchased from Ward, of Rochester. Through the kindness of Dr. Henry Woodward, of the British Museum, we have secured a singularly perfect specimen of the Irish elk (Megaceros Hibernicus), which Dr. Woodward assures us is in some respects even finer than the specimen mounted in the national collection in London. While the expanse of the antlers is a little less than in that specimen, the palmation is much broader, and the beam is heavier. A number of other fossil vertebrate remains are included in the collection, among them a fine skeleton of the Moa. Through the kindness of Mr. I. F. Mansfield, who for a small sum consented to reopen and pump out an abandoned coal-mine, which is very rich in fossils, and which had once been resorted to by the authorities of the Geological Survey of Pennsylvania, we have been able to obtain a very large collection of the fossil plants of that portion of the

coal measures represented in the Pittsburgh district. Numerous additions to the collection of fossils have been made by individual donors, full credit for which is given in the list of accessions.

COMPARATIVE ANATOMY.

The Museum has purchased quite a large series of osteological specimens from various sources, and to this collection there has been added, by the generosity of Mr. Carnegie, a magnificent series of models and anatomical preparations made by Auzoux and Les Fils d'Emile Deyrolle, of Paris. The whole collection cost in the neighborhood of $5,000. This collection has proved itself one of the most interesting features of the Museum, and its value for educational purposes can scarcely be overestimated. To it has been added, through the kindness of the same generous donor, a collection of models made by Fric of Prague. Other collections illustrating the leading facts in comparative anatomy are in process of preparation, the authorities utilizing the material which has come into the possession of the Museum in various ways. A series representing the development of the fore-arm in the various classes of vertebrate animals, and another series of specimens representing the teeth, was purchased from Ward, of Rochester. Both of these collections have attracted much attention.

BOTANY.

The collections of the Western Pennsylvania Botanical Society, one of the societies affiliated with the Academy of Science and Art, are accessible to Mr. J. A. Shafer, our curator in the department of botany, and we obtained by purchase the large collection of the late Prof. Gustave Guttenburg, which Mr. Shafer is arranging. Other collections have been contributed, and upon the basis of these Mr. Shafer is at present engaged in preparing for publication a list of all the plants known to be at present, or to have been in the past, indigenous in Allegheny county.

MINERALOGY.

The entire collection of Prof. Guttenburg, at his death, was purchased by the Museum, and constitutes the nucleus of the mineralogical collection at present in our possesion, to which a number of important additions have from time to time been made, principally by gift, by various individuals.

GEOLOGY.

Our geological collection, aside from such portions of the palæontological collection, to which reference has already been made, is comparatively small and unimportant. Much remains to be done in this field.

ETHNOLOGY.

An effort is being made to gather together ethnological collections, especially to form a collection which shall illustrate the characteristics of the aboriginal races of North America. Important collections are on temporary deposit in the Museum belonging to Mr. W. C. Burns, Mr. Isaac Yohe, Mr. Thomas Harper, Mr. W. P. Hanna, Mr. E. K. Morse, and J. A. Weldon. The collections of Messrs. Burns, Yohe, and Harper are composed principally of flints and stone-implements and pottery, representing the arts of the aboriginal tribes of America. From Mr. Scott N. Norris, the Museum purchased a large collection of pottery and stone-implements, made by the cliff dwellers of New Mexico. From Mrs. Ella J. Waugh we have purchased a large collection of wearing apparel, ornaments, and implements made by the Sioux and collected by her during her residence among those people. For the proper display of these objects we have employed Mr. Theodore A. Mills, of Washington, D. C., to prepare for us a number of models in plaster, life size, representing Sioux. These figures will be draped with the proper costumes. Valuable suggestions in this connection have been received from Miss Alice Fletcher, of the Peabody Museum of Ethnology, Cambridge, Mass. Other collections in ethnology have been obtained by purchase and donation. Among the more important donations was one of two mummies, purchased for the Museum by Mr. Carnegie on the occasion of a visit to Egypt, and a mummied cat, loaned by Mr. Douglas Stewart. Mr. H. J. Heinz has also loaned an Egyptian mummy. The ethnological collection has been enriched by the purchase of a number of models of the homes of the ancient Cliff-dwellers.

ANCIENT AND MEDIÆVAL ART.

Through the kindness of Mr. Andrew Carnegie, the Museum is in possession of a series of fifty-one reproductions of the celebrated Pompeiian bronzes contained in the Museum at Naples.

This very valuable and important collection has been temporarily loaned for exhibition to the Art Gallery, the authorities of which desired it for the purpose of display. Through the courtesy of Mr. Douglas Stewart a number of specimens illustrative of the art of the ancient Egyptians have been deposited in the Museum. Mr. Carnegie has donated two reproductions of suits of armor from the Museum at Venice, one representing the armor worn by Henry IV. of France, and the other by Ferdinand I., of Austria. Through Capt. A. E. Hunt, the Museum secured, for a nominal sum, a fine suit of ancient Japanese armor. Various collections representing the ornaments, and the manners and customs of ancient India, are contained in the collection as a deposit made by Mr. W. P. Hanna.

MODERN ARTS AND MANUFACTURES.

Through the kindness of a number of the leading firms of Pittsburgh, a considerable series of exhibits has been installed representing the raw materials that are employed in manufacturing steel, iron, copper, glass, plaster, asbestos, corks, and various food products. This collection of industrial exhibits we hope to be able to greatly enlarge, but the limited space at the disposal of the Museum makes such a display difficult, as more room is required than is at present at our disposal. We are indebted to the Century Company of New York for an exceedingly beautiful exhibit illustrating the modern process of book-making and illustration. The collections illustrative of the arts of manufacture and design are as yet entirely in their infancy.

HISTORICAL COLLECTIONS.

A number of collections of historical interest have been either donated to the Museum, or temporarily deposited. One of these collections, worthy of special mention, is the collection belonging to the Pittsburgh Chapter of the Daughters of the American Revolution, which has been deposited with us for safe keeping by Miss Denny, acting on behalf of the Chapter.

THE MUSEUM LIBRARY.

It is utterly impossible for those who are engaged in the work of the Museum to carry on their work successfully without having immediate and easy access to such books as they require. The

work of determining and arranging collections necessitates constant reference to the writings of recognized authorities. This fact led the Committee in charge of the Museum at an early stage of the work, to solicit contributions of books, and they have been compelled also to add a few purchases to the donations which they have received. It is highly desirable that they should be able to add yet more largely to the reference-books which are required. The proximity of the Carnegie Library has afforded some measure of relief to what would otherwise have been a very trying condition of affairs, but there are many books which that Library does not possess, and which it can scarcely be expected to purchase, which are almost indispensable to the working force of the Museum, and which ought to be obtained. The donation by Dr. John Hamilton of his library of works on the North American Coleoptera has furnished the Museum with important literature in this branch, which would be difficult to obtain. An effort is being made to secure, so far as possible, a complete set of the publications of the United States National Museum, and other kindred institutions, which are helpful in this particular line of work.

THE PRIZE ESSAY CONTEST.

It occurred to the authorities of the Museum that it would stimulate interest on the part of the youth in the schools of the city if an offer were made to award a series of prizes to those who should present the most creditable compositions relating to the Museum and its work. Two hundred dollars were set apart for this purpose. The first prize-essay contest took place in December of the year 1896, and proved so successful that a second contest was appointed for December of the year 1897. The thanks of the authorities of the Museum have been formally extended to the ladies and gentlemen who consented to act as judges of award on these occasions, but it is only proper in this report to again express the sense of indebtedness, which is felt in view of their great kindness. That the plan, which was initiated here, is one that approves itself, is evidenced by the fact that it has been in the last year taken up and adopted by museums elsewhere.

THE ANDREW CARNEGIE NATURALISTS' CLUB.

A number of boys formed an organization which assumed the name of the Andrew Carnegie Naturalists' Club, and they, with the consent of Mr. Smith, met weekly in the laboratory of the

Museum, and from Mr. Smith received practical instruction in various matters relating to natural history. The membership of this club was quite large, as many as forty being at times present. During the latter portion of Mr. Smith's connection with the Museum, his duties were of so onerous a character as to prevent him from giving as much attention to these young people as he would like to have bestowed. The organization still exists, however, and the result has been the development in the case of a dozen or more of the young people of the community, of a decided taste for natural history pursuits, and several of the lads whose first interest was thus aroused have been able to render some genuine assistance in the work of the Museum, and bid fair ultimately to become naturalists of promise. It is hoped that the good work of these young people may be continued, and the sympathetic aid of the Director will be extended to them and all similar organizations.

CO-OPERATION WITH SCHOOLS AND COLLEGES.

One of the most pleasing features of the activity of the Museum has been the manner in which those in charge of the work have been enabled to coöperate with the teachers in the various schools and colleges, not only of Pittsburgh, but of the country adjacent thereto. It has been quite common for teachers in various schools to bring their classes to the Museum, and the professors in some of the higher institutions of learning have likewise from time to time resorted to the Museum attended by considerable bodies of students. Every effort has been made to aid these parties in deriving from the collections which are gathered here, those advantages which they are intended to convey. Prof. Diller, of the Dental Department of the Western University of Pennsylvania, has made use of the anatomical and dental collections for the purpose of instructing his classes. Like use has been made of the collections by the professor of zoölogy in the collegiate department of the same institution. Prof. Rynearson, of the Pittsburgh Central High-School, has frequently brought his classes in anatomy and zoölogy to the Museum for an afternoon, and the anatomical preparations have been freely placed at his use for purposes of demonstration. A record of the attendance in this way was kept from November 1st, 1897, to January 15th, 1898, and it was ascertained that during that time

fifty-two teachers, accompanied by their classes, aggregating two thousand one hundred and seventy-two pupils, had visited the Museum. The present Director, on several occasions during the past month, has met companies of from forty to fifty young people from the schools, and has given them brief lectures upon subjects, upon which they requested instruction, utilizing the material of the Museum for illustration. In this way, it is believed that a very large amount of good may be accomplished by the Museum, and it is hoped during the coming year that we may be able to employ persons of the requisite talent to give popular lectures on natural history, ethnology, and ancient art.

THE WORK FOR THE ENSUING YEAR.

The work which has been planned for the immediate future has been laid out with the design of adding as rapidly as possible to the facilities for instruction which the Museum is intended to furnish to the people. An almost boundless field is before us, but in view of the limits that are imposed upon us both by space and financial resources, we have necessarily to restrict ourselves. It is our design, as rapidly as possible, to gather together collections illustrative of the resources of the region in which we are placed, and we will endeavor to adhere, as far as possible, to the plan originally laid out at the inception of the enterprise. To do this will, however, require a considerable outlay of money and a still larger outlay of intelligent labor.

One of the most important items of expenditure in the Museum is that which is necessarily made in securing cases for the proper display of objects. A considerable expenditure will have to be made immediately for the purchase of cases in which to exhibit collections which are now in our possession, or which we expect shortly to secure. We have in Mr. Webster one of the most successful preparators in the country. We are very desirous of utilizing his talents in the construction of groups which shall illustrate the life-history of various important classes of animals, but we should have, in order to accomplish this, assistance of a better character than that which we have been able thus far to provide.

Mr. Herbert H. Smith having resigned his position at the Museum in order to return to the work of collecting in South America, in which, for so many years he was engaged, it is

important that the place made vacant by him should be filled by a scholarly and thoroughly competent man who may devote himself particularly to the care and development of the collections in invertebrate zoölogy.

We have employed for the coming four months, Mr. Samuel N. Rhoads, lately connected with the Academy of Natural Sciences in Philadelphia, to act as a field-naturalist for the purpose of making collections for us in the immediate vicinity of Pittsburgh. Mr. Rhoads enjoys a wide reputation as a careful and skillful collector, and also as a scientific author. We hope, through his labors, to throw some important light upon interesting questions relating to our local fauna.

The exceedingly restricted space at our disposal for laboratory purposes suggests the importance of an arrangement whereby, if possible, the large room at the eastern end of the corridor in the basement of the Museum may be placed at the disposition of our working force. It is at present occupied by the Art Students' League, a company of young ladies who have organized themselves for purposes of art-study, and who meet there during the fall and winter months. If an arrangement could be made by which other accommodations could be furnished them, the work of the Museum could be prosecuted to much better advantage than is at present the case. Under the present circumstances the chief preparator and his assistants contend with many and serious difficulties, which necessarily involve considerable loss of time and effort.

In order to carry on the work for the coming year as it should be carried on upon the lines which have been laid out, and which we feel certain have the approval and sympathy of the founder of the institution, it will be necessary for us to have an appropriation not less generous than was made to the Museum at the beginning of the year which has just closed. That such an outlay will be well expended I think has been demonstrated by the experience of the two years during which the Museum has been open to the public, and I take occasion to remind the gentlemen who compose the Board of Trustees of the fact that the Museum is constantly open, and that it is at the present time one of the most popular and useful departments of the institution, being often thronged with visitors when other portions of the great building are

resorted to by comparatively few. Observation teaches us that this open book which we are constructing here, which appeals directly to the eye and through the eye to the mind, is one of the most popular volumes that has been placed before the public of Pittsburgh through the generosity of the founder of the Carnegie Library.

ANNUAL AWARD OF PRIZES.

The list of those who won prizes at the Annual Essay Contest is as follows:

HIGH SCHOOL.

TEFFT HEWITT,	3745 Boquet Street.
EDWARD J. I. GANNON,	3412 Melwood Street.
JOS. REED,	413 Pacific Ave.
CHAS. CAMPBELL,	Cor. Lincoln and Shetland Aves.
MARY CORRY,	5706 Carnegie Ave.
FREDERICK SHIVELY HARMONY,	2317 Sidney Street.
MAX HENRICI,	317 Shetland Ave.
GRACE S. EVANS,	214 Main Street.
RICHARD WILSON MARTIN,	905 Wylie Ave.
ALEXANDER BLACK,	254 Pacific Ave.
EDITH E. GRAY,	2014 Carson Street.
EDNA KLEIN,	103 Allen Ave.
ORVILLE FLISTER,	6920 Hamilton Ave.

STEP FOURTEEN. WARD SCHOOLS.

HARRY B. Macrory,	18 Kearsarge Street.
ALICE THURSTON MCGIRR,	Homewood Ave.
STEWART M. VOCKEL,	2023 Jane St., S. S.
EDITH GRAY,	7012 Frankstown Ave.
ROBERT FOERSTER,	4213 Fifth Ave.
ELLIS M. FROST,	Winthrop Street.
MELZIE H. PROUDFIT,	5876 Ellsworth Ave.
EDWARD A. EVANS,	2704 Carson St., S. S.
PAUL PLUEDDERMAN,	167 Fortieth Street.
ROSE KELFY,	2717 Penn Ave.
H. C. ORR,	714 Maryland Ave.
E. F. HAYS, JR.,	218 Coltart Sq.
BESSIE ROSS,	6 Point View Ave.

FINANCIAL STATEMENT

OF THE

CARNEGIE MUSEUM, PITTSBURGH, PENNA.

APRIL 1, 1896—APRIL 1, 1897.

RECEIPTS.

1896.			
April 1.	To Appropriation, ...	$ 8,000	00
Dec. 4.	To Appropriation, (additional)	4,000	00
1897.			
Feb.	Rebate returned by P. R. R. account freight on models of International S. S Co.'s ships, ...	43	14
Mar. 31.	Difference between account of Treasurer and C. C. Mellor, Chairman Museum Committee, ...	40	

DISBURSEMENTS.

1897.				
April 1.	By Salaries, ...	$ 2,752	04	
	" Labor, ...	82	10	
	" Traveling Expenses, . .	163	38	
	" Special Research (McKee's Rocks Mound, etc.), .	712	60	
	" Lectures, ...	137	00	
	" Office Furniture, . . .	250	25	
	" " Supplies, ...	122	45	
	" Postage and Telegrams, .	106	96	
	" Packing and Unpacking, .	236	29	
	" Freight and Expressage, .	617	79	
	" Cases, Drawers, etc., . .	3,830	08	
	" Glassware and Corks, . .	134	72	
	" Alcohol, Spirits, etc., . .	41	30	
	" Boxes, Trays, etc., . . .	104	85	
	" Printing Labels, etc., . .	192	59	
	" Photographs, Frames, etc.,	117	10	
	" Laboratory Fixtures, . .	80	04	
	" " Supplies, . .	75	82	
	" Purchase of Collections, .	1,806	15	
	" Prizes (Annual Essay Contest), ...	200	00	
	Balance on hand, April 1, 1897,	280	03	
		$12,043	54	$12,043 54

FINANCIAL STATEMENT

OF THE

CARNEGIE MUSEUM, PITTSBURGH, PENNA.

April 1st, 1897—April 1st, 1898.

RECEIPTS.

1897.			
April 1.	To Balance on hand,	$ 280 03	
" 9.	" Appropriation,	20,000 00	
" 9.	" Appropriation, additional, account interest on balances,	326 31	
" 9.	" Refunded by Stevenson & Foster Co., account overcharge,	13 25	
1898.			
Mar. 1.	" Refunded by H. H. Smith (petty cash balance),	35 00	

DISBURSEMENTS.

1898.			
April 1.	By Salaries,	$ 5,152 31	
	" Labor,	40 15	
	" Traveling Expenses, Carfare, etc.,	491 44	
	" Books and Periodicals,	416 01	
	" Office Furniture,	1 25	
	" Office Supplies,	130 57	
	" Postage and Telegrams,	43 70	
	" Packing and Unpacking,	92 17	
	" Freight and Expressage,	518 13	
	" Cases, Drawers, etc.,	1,700 45	
	" Glassware, Corks, etc.,	102 61	
	" Alcohol, Spirits, etc.,	16 39	
	" Boxes, Trays, etc.,	137 10	
	" Printing, Labels, etc.,	85 90	
	" Photographs, Frames, etc.,	63 85	
	" Laboratory Fixtures,	468 96	
	" Laboratory Expenses,	254 13	
	" Purchase of Collections,	10,381 48	
	" Prizes (Annual Essay Contest),	200 00	
	" Expenses of Taxidermic Laboratory,	308 27	
	Balance on hand, April 1, 1898,	49 72	
		$20,654 59	$20,654 59

PERMANENT ACCESSIONS TO THE CARNEGIE MUSEUM,

From June 1, 1896, to April 1, 1898.

Donated unless otherwise indicated.

Academy of Science and Art, of Pittsburgh, Pa. Collections made from mound at Oakmont, Pa., consisting of flints, stone implements, bones, etc.; in all, two hundred and eighty objects. Excavated by the Academy. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... .... (53. 1-218)

Adams, Dr. C. M. Pittsburgh, Pa. Whip-scorpion and beetle from Florida. August 6, 1897..... .... (330.1-2)

Rattlesnake skin. Sept. 29, 1897..... (375)

Affelder, Wm. L., Allegheny, Pa. Fifty-two specimens of fossil plants, Allegheny county. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... .... (75. 1-52)

Collection of fossil plants from the Coal Measures at Bellevue, Pa. Exchange. July 7, 1897..... (306. 1-140)

Aiken & Co., Pittsburgh, Pa. Forty-seven specimens of marble and slate. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh. (65. 1-47)

Alaska Commercial Co., through F. A. Lucas, Washington, D. C. Seven skins of fur-seals. Sept. 11, 1897..... (356. 1-7)

Albree, Ralph, Allegheny, Pa. Basket used for straining "mandioca," from Trinidad, West Indies. July 10, 1897..... ..... (314)

Allegheny Zoological Garden, through Mr. D. L. Fulton. Chicken-hawk. Oct. 6, 1896..... .... (122)

Anderson, E. H., Librarian, Pittsburgh, Pa. Collection of spiders of Allegheny County, Pa., made by the late Col. J. J. Young, 125 tubes. June, 1896. These specimens were included with the books purchased by the Carnegie Library from Mrs. Young.... (77. 1-125)

Anderson, G. H., Sec., Pittsburgh, Pa. Two medals struck by the Chamber of Commerce of Pittsburgh, in commemoration of the visit of the delegates of the American International Commercial Congress to Pittsburgh, June 23, 24, and 25, 1897. August 31, 1897..... (347. 1-2)

Armstrong Bros. & Co., Pittsburgh, Pa. Series of 114 specimens illustrating the manufacture of bottle-corks. June 1, 1896, Transf. by Ac. of Sc. and Art of Pbg.... ..... (2. 1-114)

Aull, W. F., Pittsburgh, Pa. One crested pea-fowl, mounted. Nov. 15, 1896..... (157)

Atkins, George, Pittsburgh, Pa. Pheasant. Dec. 30, 1896..... (178)

Atkinson, D. A., Wilkinsburg, Pa. Fossil shell (Atrypa reticularis). Oct. 3, 1896..... (117)

Several wasps' nests (two species). Nov. 6, 1896..... (147. 1-2)

Twenty-three flint spear- and arrow-heads, and flint chips, found near the junction of Deer Creek with the Allegheny River. Nov. 15, 1896..... (155. 1-23)

Two land and two fresh-water shells from Allegheny county. April 7, 1897.... ..... (247. 1-4)

Bailey-Farrell Mfg. Co., Pittsburg, Pa. Sixty-eight specimens of ores, metals, and products of tin, lead, antimony, and bismuth. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (3. 1-68)

Baldwin, D. D., Haiku, Maui, Sandwich Islands. Sandwich Islands shells, one hundred and eighteen species and varieties, represented by seven hundred and seventy-eight specimens, mostly Achatinellæ Purchased. March 26, 1897..... (238. 1-118)

Baltimore Copper Smelting & Reduction Co., Baltimore, Md. Twenty-six specimens of copper ore. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (4. 1-26)

Barker, Susan Ann, Wilkinsburg, Pa. Two Mary Washington relics and one war relic. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh.... ..... (5. 1-3)

Barnes, Geo. D., Chattanooga, Tenn. Four specimens of fossils from vicinity of Chattanooga, Tenn. Dec. 30, 1896..... (183. 1-4)

Batchelor, Capt. Chas. W., Pittsburgh, Pa. Elk head. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (36)

Beach, G. M., Pittsburgh, Pa. Section of original "T" rail track, laid on stone blocks for ties, of the Old Portage Railway (the predecessor of the Penna. R. R., in the route over the Alleghanies.) June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (6)

Beam, J. G., Pittsburgh, Pa. Spoke of a wagon wheel, which was blown to pieces by a nitro-glycerine explosion; section of tire of wagon used in the early settlement of this country, plowed up near the "Forbes Road," Jenner Twp., Somerset Co., Pa. June 1, 1896, Transf. by Ac. of Sc. and Art of Pittsburgh..... (7. 1-2)

Bement, J. M., Newry, Blair Co., Pa. Twelve fossils found in the foot-hills of the Alleghanies. Nov. 20, 1897..... (420. 1-12)

Bennett, Dr. F. G., Mahaffey, Pa. One hundred and forty-six specimens of minerals. August 4, 1896..... (86. 1-146)

Two hundred and thirty fossils. August 4, 1896..... (87. 230)

Three fossil fruits from railroad cut near Mahaffey, Pa., July 28, 1897..... (323. 1-3)

Four fossil fruits from railroad cut near Mahaffey, Pa. August 7, 1897..... (332. 1-4)

Fourteen fossils. September 11, 1897..... (356. 1-14)

Eggs of "mud-puppy." September 11, 1897..... (357)

Forty-three fossils from Clearfield Co., Pa. September 27, 1897. (367. 1-43)

Two fossil shells from Punxsutawney, Pa. November 23, 1897. (443. 1-2)

Benton, Rev. W. L. H., Pittsburgh, Pa. Confederate 5-cent bill, issued by the State of North Carolina, 1861. Feb. 5, 1898..... (476)

Bigham, Rev. John C., Pittsburgh, Pa. Collection of relics from the battlefields of Gettysburg and Antietam—four objects. September 30, 1896..... (109. 1-4)

Bodgers, T. G., Pittsburgh,Pa. Three Indian arrow-points, from Beaver Co., Pa.; stone axe from Colorado; stone pestle found in the Wyoming Valley, Pa., near the scene of the Wyoming massacre. November 25, 1896..... (158. 1-5)

Specimens of horn-blende and quartz from Colorado. Nov. 25, 1896..... (159)

Booth, James J., Pittsburgh, Pa. Relics from the battlefields of Gettysburg, ninety-one objects, besides four lots of bullets and eagle killed on the battlefield. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (8. 1-96)

Brent, Miss Camilla, Pittsburgh, Pa. Blue heron. October 4, 1896. (120)

Brimley, H. H. and C. S., Raleigh, N. C. Three turkey vultures, two skins, one skeleton. Purchased. January 3, 1898..... (465. 1-3)

Three young minks, with skulls, dried skins. Purchased. January 3, 1898..... (466. 1-3)

Turkey vulture. Purchased. January 6, 1898..... (467)

Brockett, Alonzo H., Pittsburgh, Pa. Five flint spear-heads, and one stone implement. June 1, 1896, Transf. by Ac. of Science and Art, of Pittsburgh..... .... (9. 1-6)

Five-dollar Bill of Bank of Fayette Co., Pa., 1826. August 17, 1897..... .... (338)

Great horned Owl. December 23, 1897..... (457)

Brown, Chas., Franklin, Pa...Archæological collection, consisting of one hundred and eighty flint and stone implements, and other objects. All found near Franklin, Pa. Purchased. December 30, 1896..... .... (179. 1-180)

Brown, Harry, Johannesburg, Transvaal Republic, South Africa. Ethnological collection from Matabele-land, including a skin kaross (witch doctor's robe), zebra skin, gun-case, three carved snuff-boxes, two bead moutchas, medicine-bag, bangles, leg-rings, medicine-stick, etc. Also photographs and maps. Purchased. November 13, 1896..... ..... (152. 1-25)

Two python skins and two ostrich eggs from Matabele-land. Purchased. November 13, 1896.... .... (153. 1-2)

Gold ore and native gold from Matabele-land. Purchased. November 13, 1896..... .... (154. 1-11)

Burford, Samuel W., Pittsburgh, Pa. Nineteen stereopticon slides of zoological objects in the Museum, made by the donor. March 30, 1898..... .... (500. 1-19)

Burtner, G. A., Freeport, Pa. Four photographs of insects injurious to plants. August 21, 1897..... .... (343. 1-4)

Bycroft, Frank, Cannelton, Pa. Jar of spiders. Purchased. Oct. 8, 1897..... .... (390)

Calumet and Hecla Mining Co., Buffalo, N. Y. Twenty-one objects illustrating the mining and manufacturing of copper. June 1, 1896 Transf. by Ac. of Sc. and Art, of Pittsburgh..... (10. 1-21)

Carlisle, W. R., New Washington, Pa. Five hair worms. September 6, 1897..... .... (354. 1-5)

Carnegie, Andrew. Two mummies with cases, from Egypt. June 1, 1896. Transf. by Ac. of Sc. and Art, of Pittsburgh..... (1. 1-2)

Two fire-backs of the Sixteenth century and andirons. June 1, 1896. Transf. by Ac. of Sc. and Art, of Pittsburgh.... (69. 1-4)

Large Alligator (A. Mississippiensis), from Florida, mounted. June, 1896..... .... (78)

Copies of two suits of armor, one worn by Henry IV. of France, and one by Ferdinand I. of Austria. December 30, 1896. (180. 1-2)

Large Mosaic (replica), and fifty-one bronzes — copies of antiques in the museum at Naples: Seneca and Hermes (5613-5614); Youth (5610); Apollon and base; Wrestler or diver (5626); Wrestler or diver (5627); Dancer (5619); Doryphoros (4885); Dancer or praying girl (5603); Demokritos (5623); Ptolemy I. Soter (5590); Herakleitos (5602); Architas (5607); Sappho (4896); Amazon (4889); Youth with chlamys (5588); Ptolemy Philadelphus (5594); Youth with long hair (5633); Scipio Africanus (5634); Ptolemy Alexander (5596); Ptolemy II. Lathyros (5600); Berenike (5992); five Cupids or Genii; four old bearded Satyrs; one young Satyr, leaping with Thyrsos; eight busts; Sleeping Faun and base (5624); Bearded Dionysos (5618); Ideal head with ringlets (5598); Archiac Appollo (Spensippe) (5608); Roman, called Sylla (4487); Roman, called Sylla (5587); Drunken Faun and base; Dancer (5621); Dancer (5604); Dancer (5620); Dancer (5605). (The numbers in brackets are those of the Neapolitan Museum.) December 30, 1896..... .... (181. 1-52) These have been placed on exhibition in the Carnegie Art Gallery.

The Knyvett collection of moths of British India, approximating three thousand species, represented by twelve thousand specimens, transferred by Dr. W. J. Holland, in whose custody they were. December 30, 1896..... .... (193. 1-3000)

Collection of models of foraminifera: (a) 12 genera; (b) 12 genera. Furnishing a complete synopsis of the system of Carpenter. September 29, 1897.... .... (382. 1-24)

Collection of one hundred models of foraminifera by Fric, of Prague, greatly enlarged, illustrating completely the system of d'Orbigny. September 29, 1897.... .... (383. 1-100)

Model of Numulites Lucasanus, by Fric, of Prague. September 30, 1897.... .... (384)

Twelve models of fresh-water rhizopods, greatly enlarged, by Fric, of Prague. September 30, 1897..... (385. 1-12)

Models of human organs: Lungs, tongue, tooth, nose, hand, section of skin, ear, finger, eye, head, lungs, digestive apparatus. From the firm of Les Fils d'Emile Deyrolle, Paris, France. Oct. 10, 1897..... .... (392. 1-12)

Models: Perch, lancelet, frog, viper's head, bee, section of bee, crayfish, plumatella, snail, anadonta, jellyfish, starfish, diastoma, ascidian, leech, arenicola, all greatly enlarged. From Les Fils d' Emile Deyrolle, Paris, France. October 10, 1897..... (393. 1-16)

Models of sweet pea (flower and pod), crowfoot, primrose, apple blossom, dead-nettle, toad-flax, daisy, wall-flower, potato blossom, iris, grape bloom, pine bloom, wheat blossom, grain of wheat, fruit of moss, section of woody stem, section of root tip. From

GORILLA.
Troglodytes Gorilla.

Carnegie, Andrew—Continued.

Les Fils d'Emile Deyrolle, Paris, France. October 10, 1897. (394. 1-18)

Model of man complete, also model of human heart, brain texture, half of head, vertical section of eye, ear, with complete synoptic table of each. From the firm of the late Dr. Auzoux, of Paris, France. October 10, 1897..... ..... (395. 1-6)

Models of gorilla, horse, set of thirty-one horse's jaws, horse's teeth, horse's foot, turkey, turkey's neck, ear of bird, sea-perch, ear of fish, serpent, viper's head, snail, cockchafer, silk-worm, with complete synoptical table of each. From the firm of the late Dr. Auzoux, of Paris, France. Oct. 10, 1897..... (396. 1-45)

Models of comparative anatomy, consisting of eleven stomachs, ten hearts, eight brains, seven nervous systems, and two lungs of various animals, from the firm of the late Dr. Auzoux, Paris, France. Oct. 10, 1897.... ..... (397. 1-38)

Six models of Radiolarians, by V. Fric, of Prague. November 6, 1897.... .... (431. 1-6)

Carnegie Library Employees, Pittsburgh, Pa. Six specimens of coleopterous and hemipterous insects, and one dragon-fly. December 30, 1896..... .... (194. 1-7)

Carnegie Steel Co., Ltd., Pittsburgh, Pa. One hundred and twenty-nine specimens of iron and manganese ores and coke. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (11. 1-129)

Series of twenty manufactured products of steel. June 1, 1896, Transf. by Ac. of Sc. and Art of Pittsburgh.... ..... (12. 1-20)

Clapp, Geo. H., Pittsburgh, Pa. Sixty-seven species of shells, mostly from Allegheny Co., Pa., represented by 546 specimens; one pen of cuttle fish. June 1, 1896, Transf. by Ac. of Sc. and Art of Pittsburgh..... .... (13. 1-68)

Fossil cast of shell from lime quarries near Ocala, Fla.; two fragments of manatee ribs, Bone Valley phosphate mines, Fla., June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh.... (73. 1-3)

Five hammer-stones and unfinished celt from near Leetsdale, Allegheny Co., Pa. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh .... (74. 1-6)

Six fossil shells from Texas. July 31, 1896..... (81. 1-6)

One hundred insects from Pennsylvania, mostly coleoptera from Allegheny Co. August 4, 1896..... .....(84. 1-100)

Calcite from West Virginia. Sept. 29, 1896..... (105)

Specimen of Monterey cypress in fruit, California. September 29, 1896.... .... (106)

Shells, mostly from San Diego, Cal., about one thousand specimens. Sept. 30, 1896..... .... (112. 1-1000)

Clapp, Geo. H.—Continued.
Batrachian. October 5, 1896..... .... (121)
Four fossil shells from Stoop's Ferry, Allegheny Co., Pa. Dec. 10, 1896.... .... (172. 1-4)
Three specimens of seaweeds covered with Bryozoa, etc. Jan. 20, 1897..... .... (201. 1-3)
Two fossils (Pentremites). January 20, 1897.... ..... (202)
Marine shells, one hundred and thirty-four species, represented by four hundred and forty specimens. Jan. 20, 1897... (203. 1-134)
Three shells from Bermuda. March 9, 1896..... ..... (230. 1-3)
Two echinoderms. March 16, 1897..... (233. 1-2)
Six minerals. February 16, 1897..... (234. 1-6)
Seven bivalve shells from Davis Bayou, Mississippi. March 16, 1897..... .... (235. 1-7)
Twenty-nine insects from Edgeworth, Allegheny Co., Pa., July 30, 1897..... .... (327. 1-29)
Brachiopod shell from San Diego, Cal. September 5, 1897.. (352)
Two lots of fruits. March 16, 1897..... (236. 1-2)
English greyhound. March 31, 1897..... (240)
Fresh-water sponge, Ohio River, opposite Edgeworth, Allegheny Co., Pa. May 16, 1897..... ..... (272)
Milk snake. September 11, 1897..... (359)
Geological specimen. October 4, 1897..... (389)
Slug (Limax maximus). October 20, 1897..... (422)
Land shell from Luzon, Philippines. November 18, 1897.. (437)
Three oyster shells from Deer Island, Mississippi Sound. Dec. 4, 1897..... .... (449. 1-3)

Clapp, Geo. H., Herbert H. Smith and Mrs. Herbert H. Smith, Pittsburgh, Pa. One thousand fresh-water shells (Unionidæ) from Beaver River, at Wampum, Lawrence Co., Pa. October 15, 1897 .... (407. 1-1000)

Clarke, Chas. J., Pittsburgh, Pa. Alligator egg, with young alligator. December 30, 1896..... .... (176)

Dalley, Chas. A., Carnot, Pa. Specimen of auriferous quartz, Alaska, near coast of Burner's Bay. February 17, 1898..... (481)

Daly, Mrs. Wm. H., Pittsburgh, Pa. Brick from the House of the Vestal Virgins, Rome, Italy. May 12, 1897..... (269)

Davis, Evan, Orange, Cal. Two California condors. Purchased. December 1, 1897..... .... (446. 1-2)

Davis, Jos. M., Pittsburgh, Pa. Bone of a whale. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (14)

Deming, J. L., Bellevue, Pa. Two star-fish from North Carolina. September 30, 1896..... .... (110. 1-2)

Forty-four specimens of shale, with fossil plants, from Jack's Run, near Pittsburgh, Pa. Collected. November 30, 1896.. (167. 1-44)
Three coleopterous and two hemipterous insects. April 29, 1897 (258. 1-5)

Dickson. T. H., Pittsburgh, Pa. Twenty-five flint arrow-heads and fragment of stone gorget. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... .... (15. 1-26)

Dickson, T. H., and Shaffer, H. L., Pittsburgh, Pa. Collections of Indian antiquities, flints, etc., 734 specimens, June 1, 1896, Transf. by Ac. of Sc. and Arts, of Pittsburgh..... (16. 1-734)

Eakin, Rev. J. A., Bangkok, Siam. (Through Dr. W. J. Holland.) Siamese painting. May 11, 1897..... ..... (268)

Ebert, Wm. T., Pittsburgh, Pa. California quail. March 18, 1898.. (497)

Ehrmann, G. A., Pittsburgh, Pa. Twenty-two specimens of Diptera and Hymenoptera from Allegheny Co., Pa. Exchange. July 25, 1896..... .... (80. 1-22)

One hundred specimens of land and freshwater shells from Allegheny Co., Pa. Exchange. August 4, 1896..... (88. 1-100)
Insects from Charleroi, Washington Co., Pa., one hundred and seventy specimens. Exchange. November 15, 1896.. (156. 1-170)
Two land shells (Mesodon albolabris). Exchange. Nov. 30, 1896.... .... (164)
Specimen conglomerate. Exchange. November 30, 1896... (165)
Three hundred and forty-two named species of Coleoptera from Allegheny Co., Pa., represented by nine hundred and eighty-six specimens. Exchange. December 30, 1896..... (182. 1-342)
Ichneumons from Allegheny Co., Pa., about fifty species and one hundred specimens. Exchange. December 30, 1896.. (184. 1-50)
Collection of reptiles in alcohol, several dried crustaceans, star-fishes, etc.; twenty-five specimens. Exchange. December 30, 1896.... .... (185. 1-25)
Fifty-six mounted specimens of insects, mostly Hemiptera, from Charleroi, Washington Co., Pa. Exchange. February 28, 1897. (222. 1-56)
Ninety-six spiders, from Charleroi, Washington Co., Pa. Exchange. February 28, 1897.. .... (223. 1-96)
Forty-four fossils, principally from Dayton, Ohio. Exchange. February 28, 1897.... .... (224. 1-44)

Ehrmann, G. A.—Continued.

Ninety land shells, from Charleroi, Washington Co., Pa. Exchange. February 28, 1897..... .... (225. 1-90)

Various insects, mostly from Allegheny and Washington counties, Pa. Three hundred and fifty specimens. Exchange. March 31, 1897.... .... (241. 1-350)

Insects, one hundred specimens Hemiptera and Hymenoptera, from Charleroi, Washington Co., Pa. Exchange. July 7, 1897. (307. 1-100)

Thirty-three bottles of spiders, from Charleroi, Washington Co., Pa. Exchange. July 8, 1897.... .... (308. 1-33)

Fifty specimens of land shells. Exchange. July 8, 1897. (309. 1-50)

Insects, one hundred and ten specimens, from Charleroi, Washington Co., Pa. Exchange. July 8, 1897..... .... (310. 1-110)

Land shells, sixty-two. August 16, 1897..... (337. 1-62)

Land shells, fifty-six specimens from Allegheny Co., Pa. September 1, 1897..... .... (350. 1-56)

Land shells, fifty-three, from Allegheny Co., Pa. September 9, 1897.... .... (355. 1-53)

Thirty-nine specimens of Hymenoptera, two specimens of Orthoptera and one cicada. Exchange. September 27, 1897.. (368. 1-42)

Two hundred fresh-water shells (Unionidæ) from the Monongahela River, at Charleroi, Washington Co., Pa. Purchased. October 21, 1897.... .... (424. 1-200)

Fifteen insects collected at Charleroi, Pa., in 1897. March 7, 1898. (487. 1-15)

Ellis, J. B., Pittsburgh, Pa. Flint spear-point found on Butler st., Pittsburgh, in excavating for foundation. May 16, 1897..... (271)

Fairman, Capt. Chas. M., Pittsburgh, Pa. Three photographs, Ohio River navigation. January 29, 1897..... ..... (211. 1-3)

Falconer, Wm., Pittsburgh, Pa. Two coleopterous insects from Missouri August 4, 1896..... .... (85. 1-2)

Farmer, Wm. R., Edgewood Park, Pa. Four pieces of pottery from Guatemala. August 31, 1897..... .... (348. 1-4)

Fitzsimmons, J. C., Pittsburgh, Pa. Rattlesnake, from Des Moines, Iowa, killed by Miss McClaren. February 20, 1897..... (219)

Flack, J. B., Pittsburgh, Pa. Stone axe, found in lower part of Bellevue, Pa. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh. (17)

Foerster, Robert, Pittsburgh, Pa. Fossil plant found on a hillside near the Museum. March 20, 1897..... ..... (237)

Two specimens fossil plants found near Pittsburgh, Pa., May 1, 1897.. .... (265. 1-2)

Two hundred and fifty fresh-water shells from Chautauqua Lake, N. Y. Exchange. July 30, 1897..... (325. 1-250)

Sixteen fossils from Chautauqua, N. Y. July 30, 1897.. (326. 1-16)
Turbo sp. August 12, 1897..... ..... (334)

Ichneumon fly. August 17, 1897..... ..... (339)

Five fresh-water shells (Unionidae) from Dead Man's Island, Ohio River. October 13, 1897..... .... (400. 1-5)

Ford, Hon. H. P., Pittsburgh, Pa. Thanksgiving proclamation issued by the governor of Vermont in 1817. November 30, 1896.... (166)

Forest Oil Co., Pittsburgh, Pa. Six specimens of oil-bearing rock, and crude petroleum. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... .... (18. 1-6)

Foster, G. J., Pittsburgh, Pa. Bat. August 4, 1894..... (89)

Fox, Prof. W. J., Philadelphia, Pa. Collection of shells of the family Cerithiidæ, together with a few marine and terrestrial species from Jamaica, in all about one hundred and twenty-five species, represented by eight hundred specimens. February 28, 1897 (226. 1-125)

Franks, R. A., Pittsburgh, Pa. Two rolls of maps. October 13, 1897. (405. 1-2)

Franks, Mrs. Samuel, Allegheny, Pa. Two papers—"Extract of letter from Fort Pitt, 1767," and "Appeal from decision of the late Judge Smith at a Circuit Court of Allegheny, in November, 1805." December 2, 1897..... .... (448)

Frick, H. C., Pittsburgh, Pa. Frame, with United States fractional currency. December 30, 1896..... .... (195. 1-21)

Friday, Miss F., Pittsburgh, Pa. Specimens of native salt from mines at Berchtesgaden, Austria. March 6, 1897..... (228. 1-3)

Two fossil shark's teeth. March 6, 1897..... (229. 1-2)

Frierson, L. S., Frierson's, La. Nineteen species of Unionidæ, represented by ninety-five specimens. Exchange. March 17, 1898. (490. 1-19)

Frost, Albert, Pittsburgh, Pa. Three shells. Exchange. January 29, 1897..... .... (206. 1-3)

Frost, Ellis, Pittsburgh, Pa. One hundred and thirty hymenopterous insects, from Caledonia Co., Vermont. Exchange. August 9, 1897..... .... (333. 1-130)

Batrachians (twenty-eight), collected in Caledonia Co., Vermont. Exchange. September 27, 1897..... .... (366. 1-28)

Nine bottles spiders, from Caledonia Co., Vermont; five myriapods. Exchange. September 29, 1897..... ..... (379. 1-14)

Fulton, D. L., Allegheny, Pa. Copperhead snake; an unusually large specimen. July 9, 1897..... (311)

Fulton, D. L., Mrs. H. H. Smith, J. Robson and H. Huntington, Pittsburgh, Pa. Birds collected at Cheat Mountain, West Virginia. August 4, 1897..... .... (94. 1-50)

Fulton, W. W., Pittsburgh, Pa. Spider. September 29, 1896..... (107)

Garrett, Robt., Pittsburgh, Pa. Fossil tooth from the Argentine Republic. Nov. 8, 1896.... .... (149)

Gentry, Prof. T. W., Philadelphia, Pa. Ruby-throated humming-bird. September 18, 1897.... .... (364)

Gerrodette, F. H., Pittsburgh, Pa. Collection of flints and other Indian implements from McKee's Bottom. Purchased. July 15, 1896. (79. 1-42)

Frog. Collected. Sept. 13, 1896..... (101)

F. H. Gerrodette and Thomas Harper, Pittsburgh, Pa. Objects excavated at McKee's Rocks Mound, consisting of thirty-one skeletons and fragments of skeletons, arrow-points, shells, beads, bones of various animals, etc., together with earth surrounding the burial-places, stones used for encasing the dead and sections of large trees growing above the remains. In all, about three hundred and thirty-one objects, besides a series of photographs made during the excavations. Collected. Sept. 30, 1896..... (111. 1-331)

Gerstner, Frank, Bloomfield, Pa. Old cannon-ball found on hillside to the right of Brinton railroad bridge, near East Pittsburgh. Dec. 30, 1896.... .... (186)

Gormley, W. M., Pittsburgh, Pa. Cannon-ball found near the site of old Fort Pitt. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh.... .... (19)

Greensburg High School, Greensburg, Pa. Shells, mostly marine, one hundred and fifty-seven species, represented by two hundred and sixty specimens. Exchange. July 5, 1897..... (305. 1-157)

Guttenberg, Prof. Gustave, Pittsburgh, Pa. Various zoological collections, twenty-five specimens. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh.... .... (21. 1-25)

Herbarium, containing about fifteen hundred specimens; thirty-five specimens of woods and various fruits. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (22. 1-1550)

Collection of Minerals and fossils, five hundred and fifty specimens. Purchased. August 20, 1896..... ..... (96. 1-550)

Guttenberg, Estate of Gustave, Pittsburgh, Pa. One thousand herbarium specimens. Purchased. April 20, 1897..... (251. 1-1000)

Hamilton, Dr. John, Allegheny, Pa. (Bequest through Dr. W. J. Holland, Testamentary Trustee.) Collection of coleoptera of the United States, approximating eight thousand species, represented by sixty thousand specimens, including two thousand one hundred and fifty-three species enumerated in his catalogue of the species of Southwestern Pennsylvania. Sept. 1, 1897..... (349. 1-8000)

Hamilton, Wm., Allegheny, Pa. Two bones of whale. Dec. 18, 1897. (453. 1-2)

Handy, James O., Pittsburgh, Pa. Sixty-seven marine shells from Europe. Sept. 11, 1897..... ..... (360. 1-67)

Hanna, W. P., Pittsburgh, Pa. Skeleton and skin of kangaroo. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (25. 1-2)

Shells, mostly from Australia and Ceylon, about one hundred and sixty-five species, represented by four hundred specimens. Exchange. July 10, 1897..... ..... (313. 1-165)

Harper, J. A., Pittsburgh, Pa. Indian stone pestle and axe. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (23. 1-2)

Harper, Thomas, Bellevue, Pa. Two nests of white-faced hornet. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh.... (24. 1-2)

Impression of fossil plant (Lepidodendron) found near Rock Point, Beaver Valley. Oct. 9, 1896. .... (123)

Harper, Thomas, and F. H. Gerrodette, Pittsburgh, Pa. Objects excavated at McKee's Rock Mound, consisting of thirty-one skeletons and fragments of skeletons, arrow-points, shells, beads, bones of various animals, etc., together with earth surrounding the burial-places, stones used for encasing the dead and sections of large trees growing above the remains. In all, about three hundred and thirty-one objects, besides a series of photographs made during the excavations. Collected. Sept. 30, 1896..... (111. 1-331)

Hart, Mrs. C. J., Lisbon, Portugal. Shells from East Africa, including one hundred and two species of univalves, represented by two thousand specimens. Jan. 29, 1897..... (208. 1-102)

Hayes, Edward, Pittsburgh, Pa. Six myriapods. April 2, 1897 (243. 1-6)
Two snakes from Allegheny County, Pa. May 25, 1897. (276. 1-2)
Two snakes collected at Ohio Pyle Falls, Pa., May 29, 1897. June 1, 1897..... .... (283. 1-2)

Hayes, Edward, and Ralph Taylor, Pittsburgh, Pa. Six crayfish and one snake from the Ohio River near Bellevue, Pa. March 31, 1897..... .... (239. 1-7)
Thirty coleoptera from Allegheny County, Pa. April 2, 1897. (242. 1-30)

Hazzard, Dr. T. L., Allegheny, Pa. Nest of white-faced hornet. Nov. 27, 1896..... .... (162)
Two jars of snakes. Dec. 30, 1896..... ..... (187. 1-2)

Heimstreet, Dr. J. B., Troy, N. Y. Collection of birds, containing scarlet ibis, ger-falcon, ivory-bill woodpecker, and twenty-five other rare species—in all, thirty-one skins. Purchased. June 18, 1897. (288. 1-31)
Section of poplar wood from Michigan, showing beaver gnawings through unusual thickness. June 18, 1897..... (289)

Heinz, H. J., Allegheny, Pa. Cast of Mentone palaeolithic man, in case. March 5, 1897..... .... (227)
Cast of skull of fossil lion from Florida, (Machaerodes). April 23, 1897..... .... (256)

Henk, Henry, Pittsburgh, Pa. Relics found in arsenal grounds, Pittsburgh, after the explosion of September 17, 1862, twenty-three specimens. Aug. 6, 1897..... ..... (331. 1-23)

Hesser, Mrs. J. B., Pittsburgh, Pa. Two antique pistols, once the property of Sir James Stewart. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... .... (26. 1-2)

Hill, Chas., Pittsburgh, Pa. Ring-snake in alcohol. Jan. 3, 1897.. (197)

Hodges, E. P., Pittsburgh, Pa. Mexican sombrero and pair of skates from Holland. Feb. 24, 1897..... ..... (220. 1-3)

Holland, Estate of F. R. Collection of shells, by estimate six thousand species and fifty thousand specimens. Purchased. Sept. 27, 1897. (369. 1-6000)
Eight fossils (the larger two are from Jamaica). Sept. 27, 1897. (370. 1-8)

Eighteen species of Jamaica seeds. Sept. 27, 1897..... (371. 1-18)

Two calabashes. Sept. 27, 1897..... ..... (372. 1-2)

Arrow-point. Sept. 27, 1897..... ..... (373)

Burnt corn from the site of the Indian village at Gnadenhuetten, Ohio, which was burnt after the Christian Indians inhabiting it had been massacred by a party of whites from near Pittsburgh. Sept. 27, 1897..... .... (374)

Holland, Dr. W. J., Pittsburgh, Pa. Field-mouse. July 31, 1896... (82)

Eggs of sixteen species of sea-birds, procured from the rocks of Handa, Scotland. August 20, 1897..... (341. 1-16)

Fifteen African bird-skins. Aug. 29, 1897..... (346. 1-15)

Twenty-nine shells collected at John o'Groat's, Scotland. Sept. 29, 1897..... .... (378. 1-29)

Gorilla skin and skeleton from the valley of the Ogove River. Purchased. Oct. 15, 1897..... ..... (406. 1-2)

Holland, Moorhead B., Pittsburgh, Pa. Young alligator, specimen in alcohol. April 5, 1897..... .... (244)

Holmes, A. V., (through Jos. Eichbaum, Pittsburgh, Pa.). Gar-pike. May 31, 1897..... .... (282)

Houston, Ross P., Pittsburgh, Pa. Three geological specimens from Center Co., Pa. Nov. 17, 1897..... (436. 1-3)

Two specimens of clay and limestone found near Pittsburgh, Pa. Dec. 12, 1897..... ..... (452. 1-2)

Howell, E. T., Pittsburgh, Pa. Stone from an Indian burial-ground, with markings resembling a human face. April 29, 1897..... (262)

Huhn, Miss Estelle, Pittsburgh, Pa. Spider. Collected. Sept. 13, 1896. (102)

Hunt, Capt. A. E., Pittsburgh, Pa. Two suits of Japanese armor. Jan. 29, 1897..... .... (207. 1-2)

Hunt, H. B., Pittsburgh, Pa. Continental scrip, two-thirds of a dollar. April 29, 1897..... .... (263)

Huntington, H., Mrs. H. H. Smith, D. L. Fulton, and J. Robson, Pittsburgh, Pa. Birds collected at Cheat Mountain, West Va. Aug. 4, 1897..... .... (94. 1-50)

Hussey, C. G. & Co., Pittsburgh, Pa. Specimens of sheet copper. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh.... (27. 1-4)

Hyndman, N. P., Pittsburgh, Pa. Map of coal-bearing fields of the Pittsburgh Coal Basin. Purchased. Oct. 13, 1897..... (404)

Illinois Zinc Co., Peru, Ill. Sixteen objects illustrating the mining and manufacture of zinc. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... ..... (28. 1-16)

Irwin, Jas. & Co., Pittsburgh, Pa. Twenty-six specimens of sulphur, fluorite, and chemicals, used in the manufacture of sulphuric and hydrofluoric acids. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh.... .... (71. 1-25)

Jackson, D. C., Allegheny, Pa. Skeleton of a mouse. Purchased. March 15, 1898..... .... (489)

Jacob, Chas. W. & Co., New York, N. Y. Monazite sand from Brazil. Nov. 12, 1896..... .... (151)

Johns, Louis, Pittsburgh, Pa. Shell, (Nerita sp.). Exchange. Jan. 18, 1897..... .... (200)

Four shells, (Crepidula unguiformis, Lam.), from Florida. Exchange. May 19, 1897.... .... (273. 1-4)

Johnson, Capt. Jas. R., Clarksville, Tenn. Turtle, the shell of which is used for ornament. Purchased. March 17, 1898..... (491)

Stone model of a Chinese pagoda. Purchased. March 17, 1898. (492)

Cartridge-box and cap-box used by U. S. soldiers in the late Civil War. March 17, 1898..... ..... (493. 1-2)

Fruit of nelumbo, (water-chinquapin), from Hopkinsville, Ky., and section of hickory twigs, showing accidental inarching. March 18, 1898..... .... (494)

Joliet Stone Quarry, Joliet, Ill. Fossil, (Lepidodendron). Sept. 30, 1896..... .... (113)

Kaltenhauser, J. T., Pittsburgh, Pa. Fossil found in Sheridan township. August 6, 1897.... .... (329)

Keeler, Prof. Jas. E., Allegheny, Pa. (through Mr. Geo. H. Clapp). Shells from Florida, about fifty specimens. Feb. 1, 1897..... (212. 1-50)

Kemmler, John W., Pittsburgh, Pa. Tracing from Indian rock-pictures found on the Monongahela River, opposite Milesborough, Pa. Nov. 1, 1896..... .... (146)

Kerbey, J. Orton, Wilmore, Pa. Fifteen ethnological specimens, bow and fourteen arrows, six lots of feathers, bottle made of crude rubber, machete, three specimens of copal, specimen of chincha and one specimen of fruit. All from Peru or Upper Amazons. Purchased. Dec. 7, 1897..... .... (450. 1-43)
Three bottles of snakes from the Upper Amazons, Brazil. Purchased. Dec. 7, 1897..... .... (451. 1-3)

Keystone Plaster Co., Pittsburgh, Pa. Thirteen objects illustrating the manufacture of plaster. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... .... (29. 1-13)

Kirke, C. L., Sharpsburg, Pa. Four shells. Exchange. Feb. 6, 1897. (215. 1-4)

Copperhead snake and lizard. Exchange. June 25, 1897. (291. 1-2)

Klages, E. A., Crafton, Pa. Collection of hymenopterous insects from Allegheny Co., Pa., also a few from Europe. In all, two hundred and fifty species, represented by eight hundred specimens. Sept. 11, 1896..... .... (100. 1-250)

Box of exotic insects, principally coleoptera, about one hundred specimens. Exchange. Oct. 21, 1896..... (126. 1-100)

Coleoptera from Allegheny Co., Pa., four hundred and fifty species, represented by about thirteen hundred specimens. Exchange. Aug. 27, 1897..... .... (345. 1-450)

Klages, Henry G., Jeannette, Pa. Two hundred and eighty mounted insects, (diptera, hymenoptera and hemiptera). Small box of hemiptera. Exchange. Sept. 8, 1896..... (99. 1-280)

European beetles, about one thousand named species, represented by about four thousand specimens. Exchange. Dec. 30, 1896. (177. 1000)

About six thousand one hundred specimens of coleoptera, mostly from Europe, also from the United States, Central America, etc. Exchange. Jan. 29, 1897..... .... (210. 1-6,100)

Klondike Museum, Pittsburgh, Pa. Five alligators. Feb. 15, 1898. (480. 1-5)

African lioness, adult; three cubs. Purchased. Feb. 17, 1898. (482. 1-4)

Kredel, H. E., Pittsburgh, Pa. Coral, (Meandrina), from Florida. Sept. 30, 1896..... .... (114)

Lang, Harry J., Pittsburgh, Pa. Insect, (Corydalus cornutus). July 1, 1897..... .... (301)

Lattin, Frank H., Albion, N. Y. Nine star-fish. Purchased. Oct. 27, 1897..... .... (426. 1-9)

Forty-one marine shells. Purchased. Oct. 27, 1897.... (427. 1-41)

Lavin, M. J., Pittsburgh, Pa. Shells from the Delaware River. Oct. 21, 1896..... .... (127)

Lawton, Miss Agnes, Wilkinsburg, Pa. Small "sea-horse" from southern coast of France. Sept. 21, 1896..... (104)

Lawton, Chas. Pittsburgh, Pa. Spider, (Epeira). Sept. 29, 1897.... (380)

Lee, Alexander Y., Swissvale, Pa. Map of Pittsburgh and vicinity. May 13, 1897..... .... (270)

Minerals from Tennessee Exposition of 1897, sixty specimens. Dec. 23, 1897..... .... (459. 1-60)

Thirty-two arrow-points and flints from Nashville, Tenn., Exposition of 1897. Dec. 23, 1897..... ..... (460. 1-32)

Two cocoons of silk-worms from Nashville, Tenn., Exposition of 1897. Dec. 23, 1897..... .... (461. 1-2)

Ores from Nashville, Tenn., Exposition of 1897—one hundred and fifty-eight specimens. Dec. 23, 1897..... ..... (462. 1-158)

Fifty-four sections wood from Nashville, Tenn., Exposition, 1897. Dec. 23, 1897..... .... (463. 1-54)

Link, G., Pittsburgh, Pa. Crow blackbird, red-winged blackbird, Baltimore oriole, cardinal red-bird. Feb. 7, 1898..... (478. 1-4)

Ludwig, Miss Mary C., Pittsburgh, Pa. Pair of elk antlers from the Teton Mountains, Wyoming. Nov. 10, 1897..... (432)

Mansfield, Hon. I. F., Beaver, Pa. Twelve barrels of fossils from the Cannelton coal mines. Purchased. Sept. 18, 1897..... (363)

Mascn, H. D., Allegheny, Pa. Rattlesnake skin. Oct. 21, 1896.. (125)

Macbeth, Geo. A. & Co., Pittsburgh, Pa. Series of thirty-two specimens of materials used in the manufacture of glass. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (30. 1-32)

McCann, David S., Pittsburgh, Pa. Fossil and concretion. Dec. 30, 1896..... .... (196. 1-2)

McCluskey, Miss Sara, Pittsburgh, Pa. Mexican paroquet, mounted. Feb. 6, 1897..... .... (214)

McConnell Asbestos Co., Pittsburgh, Pa. Fifty-six specimens of asbestos and its products. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh.... .... (31. 1-56)

McConnell, E. M., New Castle, Pa. Twenty specimens of fossil plants, horse-tail rushes for comparison with fossils, fossil Nautilus. Oct. 9, 1896..... .... (124. 1-22)

Fourteen specimens of fossil plants from the Mercer group, near New Castle, Pa. Labeled by Prof. Leo Lesquereaux. July 3, 1897..... .... (303. 1-14)

McCormick, J. S., Pittsburgh, Pa. Thirty-two specimens of coal, coke, and graphite. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... .... (32. 1-32)

McCune, C. E., Westmoreland Co., Pa. Spider, (Epeira). Oct. 21, 1897. (425)

McQuiston, James, Pittsburgh, Pa. Nine objects illustrating the process of galvanizing iron and steel. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh.... .... (33. 1-9)

Meanor, Mrs. J. C., Pittsburgh, Pa. Polyphemus moth. Nov. 27, 1896. (163)

Means, A. L., Joplin, Mo. Large specimen, extraordinarily fine, of zinc-silicate-pseudormorph after calcite, from Joplin, Mo. Feb. 3, 1897. (213)

Mellor & Hoene, Pittsburgh, Pa. Old-style square piano made in London about 1785, and upright piano made by R. & W. Nunns, New York, one of the earliest types of the upright piano. June 1, 1896, Transf. by Acad. of Sc. and Art, of Pittsburgh..... (34. 1-2)

Mellor, C. C., Pittsburgh, Pa. Two insects, (one coleopteron, one hemipteron). July 31, 1896..... .... (83. 1-2)

Miller, R., Pittsburgh, Pa. Elk-head, mounted. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (35)

Miller, W. C., Sewickley, Pa. Snake. Oct. 13, 1897..... (402)

Miller, W. L., Pittsburgh, Pa. Bread-raising basket used about 1845. April 5, 1897..... .... (246)

Montfort, R., Louisville, Ky. Four piles, showing their destruction by the teredo, Pensacola Bay, Fla. June 1, 1895, Transf. by Ac. of Sc. and Art, of Pittsburgh..... ..... (49. 1-4)

Montgomery, George, Washington, Pa. Twenty-seven bird-skins and twenty-three nests with eggs. Sept. 30, 1896..... (115. 1-50)

Moore, Clarence B., Philadelphia, Pa. Collection of twenty-two representative celts from Florida. Sept. 17, 1896..... (103. 1-22)

Burial pot and three shell implements from an ancient mound in Georgia. Dec. 30, 1896..... (188. 1-4)

Three shell drinking-cups and over three hundred and fifty bead shells, from Atwood Mound, Creighton Island, McIntosh Co., Ga. April 15, 1897..... .... (248. 1-353)

Moore, Mrs. Frank, Homewood, Pa. Large king-crab from New Jersey. March 13, 1897..... .... (232)

Moore, Geo., Jr., Verona, Pa. Indian skeleton, nearly complete, found while grading a street. May 31, 1897..... (281)

Moore, Dr. M. J. E., Allegheny, Pa. Eagle, "shot on Rich Mountain, Va., Nov. 7, 1896." Nov. 13, 1897..... (435)

Moorhead, Miss, Pittsburgh, Pa. Eighteen fossils (Pentremites) from Carrsville, Ky. June 25, 1897..... (292. 1-18)

Morse, E. K., Pittsburgh, Pa. Shells from Australia and the East Indies, about one hundred species, represented by four hundred specimens. Oct. 21, 1896..... .... (128. 1-100)

Ferns from New Zealand. Feb. 7, 1898..... (479)

Nease, Jacob, Washington, Pa. Eight snakes. Nov. 25, 1896. (160. 1-8)

Negley, Henry H., Pittsburgh, Pa. Branch of magnolia grandiflora, from tree planted by Gen. George Washington at Mt. Vernon, Va. Jan. 6, 1898..... ..... (468)

Nicola, F. F., Pittsburgh, Pa. Four fossil fishes; forty-six specimens of other fossils and minerals. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... .... (50. 1-50)

Norris, Scott N. Farmington, New Mexico. Archæological collection from New Mexico, consisting of one hundred and twenty pieces of pottery, one hundred stone implements, as mortars, grinding-stones, spears, and hatchets; human and animal bones and bone implements, with some objects of wood and yucca fibre; in all three hundred and seventy-five specimens. Purchased. June, 1896. (76. 1-375)

Obey, James, North Buffalo township, Pa. Three Indian relics from Armstrong county, Pa. May 28, 1897..... (1-3)

Orth, G. S., Pittsburgh, Pa. Skull of beaver, skin of marten, and of skunk. Sept. 20, 1897..... .... (365. 1-3)

Owens, E. J., Allegheny County, Pa. Arrow-point. May 30, 1897.. (280)

Paisley, S. T., Pittsburgh, Pa. Seven cannon balls found near the site of Old Fort Pitt. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... .... (51. 1-7)

Patterson, Joseph, Pittsburgh, Pa. Twenty-seven rare coins, including an English gold coin of the time of Cromwell. Nov. 7, 1896. (148. 1-27)

Peary, Lieut. R. E., U. S. N. Three Walrus skins. Purchased May 6, 1897... .... (270. 1-3)

Pepper, George H., Tottenville, N. Y. Scales and bones of fish from a "cache" in an ancient shell-heap near Tottenville, Staten Island, N. Y. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh. (72. 1-2)

Pflaum, Magnus, Pittsburgh, Pa. Neuropterous insect. August 1, 1897. (328)

Phipps, Henry, Jr., Pittsburgh, Pa. Large vase and plate, (ancient Moorish), excavated near the Alhambra. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... ..... (52. 1-2)

Pitcairn, A. J., Pittsburgh, Pa. Schedule of the Garfield funeral train. Nov. 19 1897,.... .... (440)

Pittsburgh Paving Co., Pittsburgh, Pa. Fourteen specimens of paving material. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh. (54. 1-14)

Pittsburgh Reduction Co., Pittsburgh, Pa. Thirty-six specimens of aluminum ores, and products. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... .... (55. 1-36)

Purnell, Estate of Jesse R. (through F. M. Purnell, Bellaire, Ohio). Pike used during the John Brown agitation. The pike was obtained at Harper's Ferry a short time after the fight, and it is believed that it was actually used by one of Brown's followers. April 20, 1897. (250)

Randolph, P. B., Seattle, Wash. Seventy-two land and fresh-water shells (named), from the Pacific slope. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh.... .... (56. 1-72)

Rankin, Thomas, Rankin Station, Pa. Piece of pine-wood, with perforations containing acorns placed there by the California woodpecker, (Melanerpes formicivorus), from southwest Texas. March 5, 1898..... .... (486)

Ransom, A. J., Blairsville, Pa. Photographs of works on original Allegheny Mountain tunnel. Dec. 30, 1896..... ..... (189)

Rea, Chas. S., Pittsburgh, Pa. Flexible sandstone from South Carolina. Oct. 13, 1897..... .... (401)

Rea & Co., Pittsburgh, Pa. Old cannon (probably French) discovered in making an excavation at Second ave. and Try street, Pittsburgh. Oct. 3, 1896..... .... (119)

Record, I. F., Pittsburgh, Pa. Skull from a mound at Battle Lake, Minn. April 29, 1897..... .... (261)

Richter, Otto, Pittsburgh, Pa. Fish found inside of an oyster shell. Nov. 27, 1897..... .... (494)

Riggs, Dr. D. W., Allegheny, Pa. Skin of skate from Silver Bay, Alaska, four violet green cormorant eggs and two Leech's petrels, from Sitka, Alaska. Sept. 29, 1897..... ..... (376. 1-3)

Four specimens of gold ore from Juneau, Alaska. Sept. 29, 1897. (377. 1-4)

Russian coin current in Alaska during the Russian occupation of that country. Oct. 27, 1897.... ..... (428)

Ritter, P. J., Pittsburgh, Pa. Nine arrow-points. July 10, 1897. (315. 1-9)

Roberts, Col. T. P. Two Indian arrow-points found by Col. Roberts on his premises on Craig street, near Center ave., Pittsburgh, May, 1897. May 5, 1897..... .... (266. 1-2)

Piece of oak lumber which had been under water for forty-three years. Aug. 21, 1897..... .... (342)

Roberts, Wm., Penfield, Pa. Sword of sword-fish. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (57)

Robinson, John G., Pittsburgh, Pa. Fossil plant (Sigillaria), fine, large specimen. Sept. 30, 1896..... .... (116)

Robson, J., Mrs. H. H. Smith, D. L. Fulton, and H. Huntington, Pittsburgh, Pa. Birds collected at Cheat Mountain, West Va. Aug. 4, 1897..... .... (94. 1-50)

Rode, Geo. W., Pittsburgh, Pa. Collection of ninety-nine envelopes with patriotic designs, used during the Civil War. June 1, 1890, Transf. by Ac. of Sc. and Art, of Pittsburgh.... ..... (58. 1-99)

Rose, J. D., Murraysville, Pa. Mole cricket. September 11, 1897.. (358)

Roth, Randall, Pittsburgh, Pa. Young alligator, mounted. Dec. 10, 1896..... .... (173)

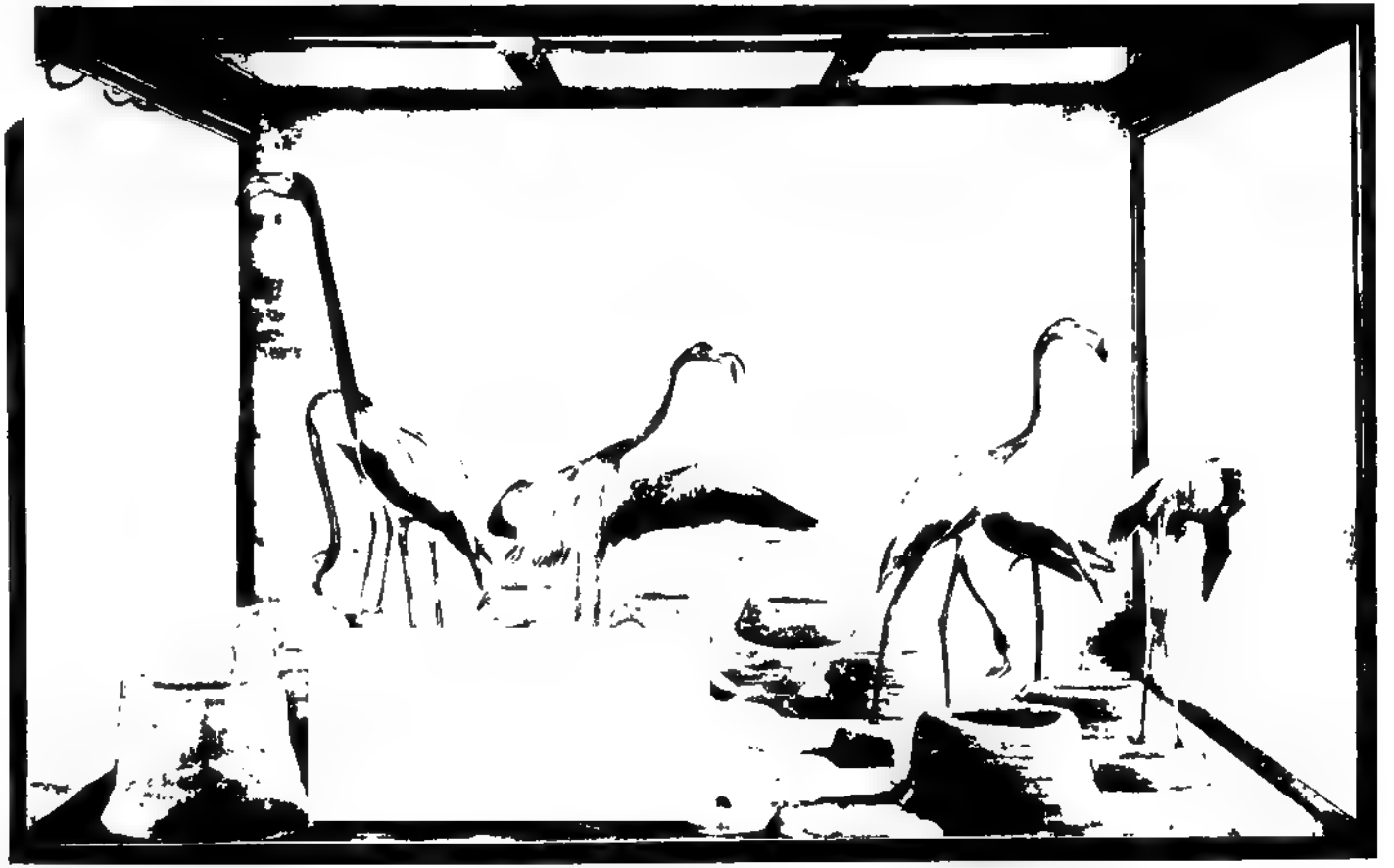
Twenty-four shells. Exchange. Jan. 29, 1897..... (209. 1-24)

Coleopterous insects, twenty-five. Aug. 20, 1897..... (340. 1-25)

Fossil shell from California. Oct. 4, 1897..... (388)

Roundberg, Julius, Pittsburgh, Pa. Specimens of lead glance, antimony glance, and zinc-blende from the Nasafjeldt mines on the boundary between Sweden and Norway. June 25, 1897..... (290. 1-3)

Rynearson, Prof. Edw., Pittsburgh, Pa. Bottle of jelly-fishes from Buzzard's Bay, Mass. Nov. 20, 1897..... (441)



GROUP OF AMERICAN FLAMINGOES.

Phœnicopterus ruber

This group represents a portion of a rookery, and contains four male and three female birds. Size of case, 8 feet by 11 feet

Scaife, O. P., Pittsburgh, Pa. Lot of seeds from the Bahamas, etc. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (59)

War-club from New Zealand and Egyptian scarab. June 1, 1896. Transf. by Ac. of Sc. and Art, of Pittsburgh..... (60. 1-2)

Twenty-five minerals. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... .... (61. 1-25)

Corals, echinoderms, and other zoological specimens. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (62. 1-25)

Nest of trap-door spider. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... .... (68)

Lot of minerals from North Carolina, thirty specimens. August 4, 1896..... .... (90. 1-30)

Lot of shells from Turk's Island, Bahamas, and other localities, about one hundred and seventy-five species, represented by over four thousand specimens. Sept. 6, 1896..... (98. 1-175)

Three minerals from North Carolina. July 28, 1897.... (324. 1-3)

Glass sponge. Oct. 4, 1897..... ..... (387)

Scarborough & Klauss, Pittsburgh, Pa. Old lock manufactured at "Birmingham, near Pittsburgh, Pa." Oct. 20, 1897.....(421)

Schade, Wilbert, Pittsburgh, Pa. Three shells. Exchange. Jan. 18, 1897. (199. 1-3)

Schmidt, John, Pittsburgh, Pa. Cavalry carbine used in the Franco-Prussian war. July 3, 1897..... ..... (304)

Schneider, Arnold, Austrian Vice-consul, Pittsburgh, Pa. Seventeen archæological objects from the Swiss lake-dwellings. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (37. 1-17)

Seager, Wm., Leetsdale, Pa. Three skunks, two opossums, two weasels, red-tailed hawk. Purchased. Jan. 28, 1898..... (473. 1-8)

Two red foxes. Purchased. Feb. 7, 1898..... (477. 1-2)

Screech-owl and three woodchucks. Purchased. March 11, 1898. (488. 1-4)

Seneca Oil Works, Warren, Pa. Nine bottles petroleum. May 10, 1897. (267. 1-9)

Shafer, Adolph T., Carnot, Pa. Box-tortoise from Allegheny county, Pa. Oct. 2, 1897..... .... (386)

Shafer, John A., Pittsburgh, Pa. Wasps' nest. Sept. 29, 1897..... (381)

Two mud-puppies from the Ohio River. Oct. 10, 1897.. (398. 1-2)

Two hornets' nests from Moon township. March 18, 1898. (495. 1-2)

Collection of seeds, two hundred and fifty species. March 18, 1898. (496. 1-250)

Plants from Allegheny county, collected in 1897, one hundred and fifty herbarium specimens. March 28, 1898..... (498. 1-150)

Pebbles of conglomerate, etc., from the terrace above Natrona, Allegheny Co., Pa. March 28, 1898..... (499. 1-9)

Shafer, Quercus T., Carnot, Pa. Bottle of spiders from Allegheny Co., Pa. Sept. 6, 1897..... .... (353)

Shaffer, A., Pittsburgh, Pa. Fourteen fragments of fossil crinoid stems. April 29, 1897..... .... (260. 1-14)

Shaffer, H. L., Pittsburgh, Pa. Aztec vase and Indian bead found near the city of Mexico. Pipe and two feathers owned by Sitting Bull. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (1-5)

Shaffer, H. L., and T. H. Dickson, Pittsburgh, Pa. Collection of Indian antiquities, flints, etc., seven hundred and thirty-four specimens. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh. (16. 1-734)

Silverman, Mortimer, Allegheny, Pa. Piece of wood from old North Church tower, Boston, 1896. Oct. 27, 1897..... (429)

Smith, Harlan I., New York, N. Y. Dug-out canoe, papoose-board, also specimens and photographs showing basket manufacture by the Ojibwa Indians. Purchased. August 20, 1896..... (97. 1-17)

Smith, H. H., Pittsburgh, Pa. Insects collected on Cheat Mountain, near the Cheat River, and at Morgantown, W. Va. About three thousand specimens. August 4, 1896..... (91. 1-3,000)

Animals from caves near the Cheat River, West Va.; insects, spiders, crustaceans, and batrachia—about thirteen species, represented by one hundred specimens. Collected August 4, 1896. (92. 1-100)

One hundred and fifty dipterous insects (Syrphidae), from New York. August 4, 1896..... ..... (93. 1-150)

Fifty ethnological specimens from Brazil, Paraguay, Mexico, and the West Indies. Oct. 21, 1896..... ..... (129. 1-50)

Crustacea, fishes, and other alcoholic specimens, mostly from Brazil and the West Indies, about five hundred specimens. Oct. 21, 1896. (130. 1-500)

Smith, H. .H—Continued.

Sponges, corals and echinoderms, dry, and in alcohol, from tropical America. Oct. 21, 1896..... (131. 1-75)

Insects collected in the vicinity of Pittsburgh during the summer and autumn, principally coleoptera, diptera, hymenoptera, and hemiptera, about three thousand species and twenty thousand specimens. Nov. 30, 1896..... (168. 1-3000)

Spiders and myriapods collected near Pittsburgh and in West Virginia, about five hundred specimens. Nov. 30, 1896.. (169. 1-500)

Twenty alcoholic specimens of reptiles, batrachians, and crustacea, collected near Pittsburgh and in West Virginia. Nov. 30, 1896. (170. 1-20)

Land shells collected near Pittsburgh, Pa., and in West Virginia, two hundred and fifty specimens. Nov. 30, 1896..... (171. 1-250)

Collection of shells, about three thousand species, represented by fifteen thousand specimens, including many rare land shells from tropical America, Australia, and the East Indies, and about five hundred marine species dredged in the West Indies. Purchased. Dec. 19, 1896..... (175. 1-3000)

Coleopterous insects from Brazil, about two thousand specimens, and fifty exotic Lepidoptera. Dec. 30, 1896..... (191. 1-2050)

About four thousand coleopterous insects from Brazil. April 29. 1897..... (264. 1-4000)

Land shells, ninety-six specimens, from Monongalia and Preston counties, West Virginia. Collected. June 25, 1897.... (293. 1-96)

Six hundred and seventy-six fresh-water shells (Unionidae) from Little Beaver Creek, Cannelton, Beaver county, Pa. Collected. Sept. 18, 1897..... (362. 1-676)

Collection of unidentified fruits from Chapada, Matto Grosso, Brazil, collected by H. H. Smith, September, 1885. Feb. 3, 1898. (475)

Diatom mud, west coast of St. Vincent, West Indies, ten fathoms. Dec. 23, 1897..... (456)

Smith, Herbert H., Mrs. Herbert H. Smith, and Geo. H. Clapp, Pittsburgh, Pa. One thousand fresh-water shells (Unionidae) from Beaver River, at Wampum, Lawrence Co., Pa. Collected. Oct. 15, 1897..... (407. 1-1000)

Smith, Herbert H., Mrs. Herbert H. Smith, and M. A. Wertheimer, Pittsburgh, Pa. Spiders, one thousand specimens, collected in Monongalia and Preston counties, West Va., June. June 25, 1897. (296. 1-1000)

Smith, Herbert H.—Continued.

Myriapods, one hundred specimens, collected in Monongalia and Preston counties, West Virginia, June. June 25, 1897. (297. 1-100)

Crustacea, fifteen specimens, collected in Monongalia and Preston counties, West Virginia. June 25, 1897..... (298. 1-15)

Insects, thirteen thousand specimens, collected in Monongalia and Preston counties, West Virginia. June 25, 1897.... (299. 1-13000)

Mammalia, twenty-eight specimens, collected in Monongalia and Preston counties, West Va. June 25, 1897..... (300. 1-28)

Vertebrates, collected in Westmoreland Co., Pa., twenty-five serpents, two turtles, ten batrachia, ten fishes and twelve mammalia. Collected July 28, 1897..... (319. 1-59)

Spiders and myriapods, three hundred and fifty specimens, collected in Westmoreland Co., Pa. July 28, 1897..... (320. 1-350)

Insects, eleven thousand five hundred specimens, collected in Westmoreland Co., Pa., July. Rich in diptera and in parasitic hymenoptera. July 28, 1897..... ..... (321. 1-11500)

Thirteen species of land shells, represented by one hundred and twenty specimens, from Westmoreland Co., Pa. Collected July 28, 1897..... .... (322. 1-13)

Smith, Herbert H. and M. A. Wertheimer, Pittsburgh, Pa. Fossils from Bellevue, Pa. Collected June, 1897..... (285)

Reptiles and batrachians, forty specimens, collected in Monongalia and Preston counties, West Virginia, June 25, 1897.. (295. 1-40)

Fossils found near Crisp, Westmoreland Co., Pa., two hundred specimens, mostly brachiopoda, from limestone. Collected July 28, 1897..... .... (317. 1-200)

Crustacea, fifteen specimens, from Westmoreland county, Pa. Collected July 28, 1897..... .... (318. 1-15)

Smith, Mrs. Herbert H., Pittsburgh, Pa. Whip-poor-will, from Cheat Mountain, West Virginia. Collected June 25, 1897..... (294)

Smith, Mrs. Herbert H., Herbert H. Smith, and Geo. H. Clapp, Pittsburgh, Pa. One thousand fresh-water shells (Unionidae) from Beaver River, at Wampum, Lawrence Co., Pa. Collected Oct. 15, 1897..... .... (407. 1-1000)

Smith, Mrs. H. H., D. L. Fulton, J. Robson, and H. Huntington, Pittsburgh, Pa. Birds collected at Cheat Mountain, West Virginia. Aug. 4, 1897..... .... (94. 1-50)

Smith, Mrs. Herbert H., Herbert H. Smith and M. A. Wertheimer, Pittsburgh, Pa. Spiders, one thousand specimens, collected in Monongalia and Preston counties, West Va., June 25, 1897.... (296 1-1000)

Myriapods, one hundred specimens, collected in Monongalia and Preston counties, West Va., June 25, 1897..... (297. 1-100)

Crustacea, fifteen specimens, collected in Monongalia and Preston counties, West Va., June 25, 1897..... (298. 1-15)

Insects, thirteen thousand specimens, collected in Monongalia and Preston counties, West Va., June. June 25, 1897.. (299. 1-13000)

Mammalia, twenty-eight specimens, collected in Monongalia and Preston counties, West Virginia, June. June 25, 1897.. (300. 1-28)

Vertebrates, collected in Westmoreland Co., Pa., twenty-five serpents, two turtles, ten batrachia, ten fishes and twelve mammalia. July 28, 1897..... ..... (319. 1-59)

Spiders and myriapods, three hundred and fifty specimens, collected in Westmoreland Co., Pa., July 28, 1897..... (320. 1-350)

Insects, eleven thousand five hundred specimens, collected in Westmoreland Co., Pa., July. Rich in diptera and in parasitic hymenoptera. July 28, 1897..... .... (321. 1-11500)

Thirteen species of land shells, represented by one hundred and twenty specimens, collected in Westmoreland Co., Pa. July 28, 1897..... .... (322. 1-13)

Smith, Dr. J. N., Markleton, Pa. Hawk. Aug. 14, 1897..... (336)
Horned owl. Sept. 11, 1897..... ..... (361)

Smith, T. B., Allegheny, Pa. Miniature copy of the "Lord's Prayer and Twenty-third Psalm, written with a common pen and without a microscope." Dec. 29, 1897..... ..... (464. 1-2)

Smith, W. Linford, Pittsburgh, Pa. Spider, (Epeira). Sept. 29, 1896 (108)

Somers Bros. & Co., Pittsburgh, Pa. Eight red-birds. Dec. 30, 1896. (190. 1-8)

Spang, Mrs. Norman, Pittsburgh, Pa. Crab, two corals, star-fish, two sea-urchins, two sponges, two egg-masses, from Florida. Feb. 15, 1897..... .... (216. 1-10)

Lot of shells from Florida, eighty species represented by one hundred and eighty-seven specimens. Feb. 15, 1897..... (217. 1-80)

Speer, J. P., Pittsburgh, Pa. Five stone implements from Edgewater, Pa. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh. (20. 1-5)

Sportsmen's Association of Western Pennsylvania, Pittsburgh, Pa. One hundred and eighty-seven specimens of birds, mostly from Western Pennsylvania. All mounted. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... ..... (39. 1-187)

Seven mammals and one young alligator, mounted. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (40. 1-8)

Stearns, F. E., Etna, Pa. Fossil fern and two minerals. Nov. 30, 1897. (445. 1-3)

Stearns, I. M., Allegheny, Pa. Five musket balls from Gettysburg. Nov. 6, 1897..... .... (430)

Sterrett, Dr. J. P., Pittsburgh, Pa. Two fragments of mammoth tooth and drift fragment with fossils. Found by Dr. Sterrett near Tuscarora Creek, Juniata Co., Pa., April 29, 1897..... (259. 1-3)

Stewart, H. S. A., Pittsburgh, Pa. Two eggs of brown marsh owl from Sandusky Bay, Ohio. April 18, 1897..... (249. 1-2)

Stotler, Mrs., Pittsburgh, Pa. Hemipterous insect, (Nepa). Oct. 3, 1896. (118)

Stupakoff, S. H., Swissvale, Pa. Lot of corals and sponges from various sources, about one hundred specimens. Oct. 30, 1896. (123. 1-100)

Surber, Thaddeus, White Sulphur Springs, W. Va. Four fox squirrels. Purchased. Feb. 1, 1898.... .... (469. 1-4)

Switzer, John, Indiana, Pa. Cane made of corncobs. May 28, 1897. (278)

Swoger, Wm., Pittsburgh, Pa. Moth. May 25, 1897..... (275)

Taylor, Ralph H., Pittsburgh, Pa. Seven porcupine quills from Canada. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh.. (41-7)

Taylor, Ralph, and Edward Hayes, Pittsburgh, Pa. Six crayfish and one snake. March 31, 1897..... (239. 1-7)

Taylor, W. H., Pittsburgh, Pa. Rattlesnake in alcohol, captured in Somerset Co., Pa., Sept. 1, 1872. Feb. 27, 1897..... (221)

Thomas, Geo. L., Pittsburgh, Pa. Shale pebble with fern impression. Bed of Lehigh River. Feb. 21, 1898.....(483)

U. S. Iron and Tin Plate Mfg. Co., Pittsburgh, Pa. Thirty-six objects, illustrating the manufacture of tin plate. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... ..... (42. 1-36)

Verner, A. F., Carmichaels, Pa. Fossil fern from Carmichaels, Pa. Nov. 25, 1896..... .... (161)

Walker, Dr. R. L., Carnegie, Pa. Four fossil plants, Allegheny Co., Pa. Nov. 9, 1896..... .... (150. 1-4)

Scales of sturgeon from the Mississippi River. April 5, 1897. (245)

Cannon-ball. Nov. 11, 1897..... ..... (433)

Three fossil shells, fossil shark's tooth, three fossil plants. Jan. 21, 1898..... .... (470 1-7)

Shell (Haliotis). Jan. 21, 1898..... (471)

Archaeological specimens, consisting of eighty-nine stone implements, etc., Jan. 21, 1898..... (472. 1-89)

Ward's Natural Science Establishment, Rochester, N. Y. Casts: Megatherium, dinoceras, glytodon, mastodon with tusks, archaeopteryx, plesiosaurus dolichodrias, plesiosaurus macrocephalus, teleosaurus, paddle of plesiosaurus, lepidotus, elephas ganesa, plesiosaurus comptoni, ichthyosaurus, egg of aepiornis and skull of diprotodon. Purchased. Oct. 30, 1896..... ..... (135. 1-15)

Casts: Chimpanzee foot, foot of Chinese girl, Livingston's arm. Purchased. Oct. 30, 1896..... (136. 1-3)

Casts: Series of thirty-seven human skulls and series of forty-nine brains of various animals. Purchased. Oct. 30, 1896... (137. 1-86)

Skeleton of man, six-fingered hand and six-toed foot. Purchased. Oct. 30, 1896..... ..... (138. 1-3)

Skeletons: Moa, horse, cow, sheep, hog, ostrich, fowl, eagle, humming-bird, iguana, python, rattlesnake, hellbender, frog, menobranchus, paddlefish, hermit-fish. Purchased. Oct. 30, 1896. (139. 1-17)

Six casts: Restoration of Pueblo Bonita, Pueblo Acoma, ruins in the Valley of Rio de Chelly and Mancos Canon, Montezuma's Well, and ruin of ancient tower. Oct. 30, 1896..... (140. 1-6)

Five relief maps—Eastern United States, Grand Canon, Yosemite Valley, Vesuvius, Mont Blanc. Purchased. Oct. 30, 1896. (141. 1-5)

Seven casts of ancient inscriptions and monuments: the Rosetta Stone, the Temple Stone, Siloam Inscription, Moabite Stone, Chaldean Deluge Tablet, Obelisk of Shalmaneser and animal mounds of Wisconsin. Purchased. Oct. 30, 1896..... (142. 1-7)

Model of octopus, squid, anatomy of coral. Purchased. Oct. 30, 1896..... .... (143. 1-3)

Mounted ostrich, group of orang-outangs, group of shrikes, group of birds of paradise. Purchased. Oct. 30, 1896..... (144. 1-4)

Giant crab from Japan, and eight other large crabs. Purchased. Oct. 30, 1896..... ..... (145. 1-9)

Mounted skeletons of porcupine, squirrel, fruit-bat, opossum, mole, snapping-turtle, box-tortoise, cat, and rat. Purchased. Oct. 18, 1897..... .... (408. 1-9)

Ward's Natural Science Establishment—Continued.

Series of arms and hands; series of teeth. Purchased. Oct. 18, 1897..... .... (409. 1-2)

Metamorphosis of frog, toad, salamander, triton, beetle, cockroach. Purchased. Oct. 18, 1897..... ..... (410. 1-6)

Collection of sponges, twenty-one specimens; collection of corals, eighty-nine specimens; six large photographs (framed) of the Great Barrier-Reef, Australia, from which most of the above were obtained. Purchased. Oct. 19, 1897..... (411. 1-116)

Series of dissected shells, sixteen species. Purchased. Oct. 19, 1897..... .... (412. 1-16)

"Alcoholic" Loligo vulgaris, Loligo peali (dissected), Metacrinus rotundus, Cymbulia peronii, Eledone moschata and octopus. Purchased. Oct. 19, 1897..... .... (413. 1-6)

Systematic palaeontological collection; collection illustrating fossilization; collection illustrating phenomenal geology. Purchased. Oct. 19, 1897..... .... (414)

Septaria, two large, fine specimens from Wyoming Co., N. Y.; polished section from Weymouth, England; ripple-marks from Berea, Ohio, and from Holyoke, Mass. Purchased. Oct. 19, 1897. (415. 1-5)

Pentacrinus subangularis (framed), fine, large specimen. Purchased. Oct. 19, 1897..... .... (416)

Casts of raindrop markings, model of trilobite, six geological models. Purchased. Oct. 19, 1897..... ..... (417. 1-8)

Meteorites from Canyon Diablo, Kansas, Poland, and Mexico. Purchased. Oct. 19, 1897..... (418. 1-5)

Casts of six gold nuggets and of twelve meteorites. Purchased. Oct. 20, 1897..... .... (419. 1-18)

Three Rattlesnakes from Florida. Purchased. Jan. 2, 1898. (465. 1-3)

Warfle, Capt., Sewickley, Pa. Two flint arrow-points. Dec. 10, 1896. (174. 1-2)

Waugh, Mrs. Ella L., Greenville, Pa. Indian trophies, consisting of wearing apparel, war and ceremonial costumes, saddles, whips, war-clubs, tomahawks, knives, pipes, etc.; in all, thirty-eight objects. Purchased. Feb. 23, 1898..... .... (484. 1-38)

Webb, Walter F., Albion, N. Y. California paroquet and Costa's humming-bird. Purchased. Dec. 1, 1897..... (447. 1-2)

Webster, Frederic S., Pittsburgh, Pa. Collection of mammals, consisting of sixty-five skins, representing thirty-three species in twenty-seven genera of thirteen families; also one skeleton and fourteen skulls of six species. Purchased. April 22, 1897..... (252. 1-80)

Collection of North American birds, consisting of one hundred and fifty skins, representing fifty-nine species in fifty genera of twenty-seven families, with nests and eggs of a few species. Purchased. April 22, 1897.... .... (253. 1-150)

Collection of exotic birds, consisting of thirteen hundred and nineteen skins, representing fifty-five species in forty-two genera of sixteen families, together with eight hundred humming-birds and four hundred unidentified specimens. Purchased. April 22, 1897. (254. 1-1319)

Iguana, python. Purchased. April 22, 1897..... (255. 1-2)
Two opossums. Purchased in market. December 20, 1897.. (455)
Three Rattlesnakes from Florida. Purchased Jan. 2, 1898. (465. 1-3)

Werle, Fred H., Allegheny, Pa. Collection of fossils, consisting of sixty specimens of fishes, etc., mostly from Europe. August 20, 1896. (95. 1-60)

Wertheimer, M. A., Brooklyn, N. Y. Fossil fish-teeth, etc., from the green-sands of New Jersey. Six named species, represented by forty-six specimens. Exchange. Jan. 18, 1897..... (198. 1-6)

Animal skull, found buried with Indian bones at Verona, Allegheny County, Pa. June 1, 1897..... (284)

Snake, and two wasps' nests with wasps, from Homeville, Allegheny Co., Pa. Collected. May 22, 1897..... (274. 1-3)

Two snakes from Ohio Pyle Falls, Fayette Co., Pa. Collected. May 29, 1897..... .... (279. 1-2)

Fourteen fossils from Bellevue, Pa. July 10, 1897..... (312. 1-14)
Fossil tooth from Ashley River phosphate bed. Exchange. Sept. 1, 1897..... .... (351)

Wertheimer, M. A. & H. H. Smith, Pittsburgh, Pa. Fossils from Bellevue, Pa. Collected. June 1, 1897.... ..... (285)
Reptiles and batrachians, forty specimens, collected in Monongalia and Preston counties, West Virginia, June 25, 1897... (295. 1-40)

Fossils found near Crisp, Westmoreland Co., Pa., two hundred specimens, mostly brachiopoda from limestone. Collected. July 28, 1897..... .... (317. 1-200)

Crustacea, fifteen specimens, from Westmoreland Co., Pa. Collected. July 28, 1897.... .... (318. 1-15)

Wertheimer, M. A., Herbert H. Smith, and Mrs. Herbert H. Smith, Pittsburgh, Pa. Spiders, one thousand specimens, collected in Monongalia and Preston counties, West Virginia, June. June 25, 1897. (296. 1-1000)

Wertheimer, M. A.—Continued.

Myriapods, one hundred specimens, collected in Monongalia and Preston counties, West Virginia, June 25, 1897..... (297. 1-100)

Crustacea, fifteen specimens, collected in Monongalia and Preston counties, West Virginia, June 25, 1897..... (298. 1-15)

Insects, thirteen thousand specimens, collected in Monongalia and Preston counties, West Virginia, June 25, 1897.... (299. 1-13000)

Mammalia, twenty-eight specimens, collected in Monongalia and Preston counties, West Virginia, June. June 25, 1897.. (300. 1-28)

Vertebrates collected in Westmoreland Co., Pa., twenty-five serpents, two turtles, ten batrachia, ten fishes and twelve mammalia. July 28, 1897..... .... (319. 1-59)

Spiders and myriapods, three hundred and fifty specimens, collected in Westmoreland Co., Pa., July 28, 1897..... (320. 1-350)

Insects, eleven thousand five hundred specimens, collected in Westmoreland Co., Pa., July. Rich in diptera and in parasitic hymenoptera. July 28, 1897..... .... (321. 1-11500)

Thirteen species of land shells, represented by one hundred and twenty specimens, from Westmoreland Co., Pa. Collected. July 28, 1897..... .... (322. 1-13)

Wharton, Chas., Jr., Pittsburgh, Pa. Two specimens manganese ore. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh. (63. 1-2)

White, Mrs. M. J., Allegheny, Pa. Lot of ferns from the Punjaub, India. Nov. 19, 1897..... .... (438)

Cashmere pheasant from India. Nov. 19, 1897..... (439)

White, Dr. T. H., Connellsville, Pa. Fossil plant from Ohio Pyle Falls, Pa. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh. (64)

White, Miss Vera. Twelve dozen fresh-water shells (Unionidae) from Little Beaver Creek; also a few land and fresh-water univalves. Purchased. Oct. 8, 1897..... ..... (391. 1-150)

Four hundred and fifty-six fresh-water shells (Unionidae). Purchased. Oct. 21, 1897..... .... (423. 1-450)

Whitehead, Bishop C., Pittsburgh, Pa. Lot of shells, mostly from Key West, about two hundred species, represented by one thousand specimens. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... .... (43. 1-200)

Ethnological collection from Alaska, fourteen objects. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (44. 1-14)

Collection of war relics. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... .... (45)

Whitehead, Bishop C.—Continued.

Several flint arrow-points and other archaeological specimens. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (46. 1-4)

Ores and minerals, twenty-five specimens. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (47. 1-25)

Corals and Echini, thirty specimens. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... .... (48. 1-30)

Fifteen plates from an old work on conchology. March 12, 1897. (231. 1-15)

Photograph of Trinity church, Pittsburgh, Pa.; piece of continental money; testament and codicil to will of Wm. Skinner, written on parchment; deed written on parchment. Oct. 11, 1897. (399. 1-4)

Engraving of academic and university gowns used at Oxford and Cambridge. Oct. 13, 1897..... ..... (403)

Whitfield, J. R., New York, N. Y. Two sabres used in the war of 1812, plain handles and forged blades. Ordered sold by the United States government, as obsolete, over thirty years ago. Oct. 30, 1896..... .... (132. 1-2)

Whitney, A. K., New York, N. Y. Tarpon, mounted. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (66)

Wilson, Sam'l R., Pittsburgh, Pa. English setter dog, "Count Noble." Dec. 18, 1897..... .... (454)

Winslow, G. H., Pittsburgh, Pa. One hundred and eleven specimens, principally of ores, minerals and fossils; also woods, pottery, etc. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh... (67. 1-111)

Wolcott, Mrs. S. P., Akron, Ohio. Forty-three envelopes, with patriotic designs used during the Civil War. Also an autograph letter of Hon. E. M. Stanton. Mrs. Wolcott was Mr. Stanton's sister; the envelopes were collected in the War Department by her son, then a lad. Feb. 17, 1897..... ..... (218. 1-44)

Wolf Bros., Pittsburgh, Pa. Series of twenty-seven objects, illustrating the manufacture of bristle brushes. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh.... .... (70. 1-27)

Wood, Willard M., San Francisco, Cal. Shells from San Francisco (Purpura lima, Chlorostoma funebrale, Hinnites giganteus), seventeen specimens. Oct. 30, 1896..... ..... (134. 1-3)

Woodward, Dr. Henry, Keeper Department Palæontology, British Museum, London. A complete and very large skeleton of the Irish Elk (megaceros hibernicus). Nov. 12, 1897. Purchased.... (434)

Worthen, Chas. K., Warsaw, Ill. Two ivory-bill woodpeckers, male and female. Purchased. April 23, 1897.... ..... (257. 1-2)

Vaux, David, Pittsburgh, Pa. Flint-lock musket. Found on an island in the Mississippi, about twenty-five miles from St. Louis, near Daniel Boone's grave. July 2, 1897..... ..... (302)

Zoological Garden, Pittsburgh, Pa. Two fallow-deer (buck and doe) and one golden pheasant. Dec. 30, 1896..... (192. 1-3)
Lineatus pheasant. Jan. 22, 1897..... (204)
Badger. June 9, 1897..... ..... (287)
Antelope. July 23, 1897..... ..... (316)
Reeves' pheasant. Aug. 13, 1897..... ..... (335)
Golden eagle. Aug. 21, 1897..... ..... (344)
Mink. Nov. 20, 1897..... .... (442)
Antelope (doe). Jan. 29, 1897..... ..... (205)
Lady Amherst pheasant. June 8, 1897..... (286)
American lynx. Dec. 23, 1897..... ..... (458)
African lion cub. Jan. 12, 1898..... (469)
Lion cub. Jan 29, 1898..... ..... (474)
Fawn, Virginia deer. March 1, 1898..... (485)

ACCESSIONS BY LOAN TO THE CARNEGIE MUSEUM.

From June 1, 1896, to April 1, 1898.

(When marked by an asterisk (*), the deposit has been returned to the owner at the date of this Report.)

Affelder, Wm. L., Allegheny, Pa. One hundred and fifty specimens of fossil-bearing shale and seventeen other fossils.* Aug. 16, 1896. (58. 1-167)

Atkinson, D. A., Wilkinsburg, Pa. Collection of two hundred and fifty-six sets of birds' eggs, many of them with the nests. This set embraces eggs of all the birds known to breed in Allegheny county. Aug. 12, 1896.... .... (57. 1-256)
One hundred and twenty-eight Bird-skins.* Aug. 12, 1896. (57. 257-384)

Atkins, George, Pittsburgh, Pa. About twenty books, lot of brackets and bird-stands.* Oct. 15, 1896..... ..... (73. 1-20)
Collection of mounted birds, one hundred specimens, including many pheasants.* Oct. 15, 1896..... (74. 1-100)

Beddoe, E. E., S. Framingham, Mass. Four minerals.* June 1, 1896. Transf. by Ac. of Sc. and Art, of Pittsburgh..... (36. 1-4)
Ivory apple from Africa; cotton ball from Atlanta, Ga. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh*..... (37. 1-2)
Seventy-two autographs of distinguished persons.* June 1, 1896. Transf. by Ac. of Sc. and Art, of Pittsburgh..... (38. 1-72)

Beddoe, E. E.—Continued.

Two stone axes, iron tomahawk, Indian tooth.* June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... ..... (39. 1-4)

Seven teeth of various animals, alligator's eyes, five eggs of skates, sea cap (sponge), Florida, specimen of beaver work.* June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (40. 1-15)

Two fossil teeth, Bad Lands; fossil shark's tooth.* June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (41. 1-3)

Wooden bowl, knife and cigar-case, Java. Opium pipe.* June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (42. 1-4)

Printed copy of will of Mary Washington, package of old newspapers, photograph (caricature) of Confederacy, twenty war relics, picture, "The Ford," made on fungus, and other relics.* June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (43. 1-30)

Plate, with twenty-two pieces of old fractional currency from various sources, twenty-four pieces of paper currency, one coin of Hadrian, one Victoria medal.* June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh.... .... (44. 1-48)

Botanical Society of Western Pennsylvania, Pittsburgh, Pa.* Seventy-seven sheets herbarium specimens. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (35. 1-77)

Bright, John, Jr., Pittsburgh, Pa. Four cases of local insects.* June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (34. 1-4)

Buchanan, Peter T., Pittsburgh, Pa. Fifteen specimens of mica. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh.. (33. 1-15)

Burns, W. C., Pittsburgh, Pa. Birds, skins and mounted specimens, one hundred and one; also other zoological specimens. Sept. 23, 1896. (64. 1-125)

Various ethnological specimens from Alaska, etc., twenty-five objects. Sept. 23, 1896..... .... (65. 1-25)

Fine collection of ancient fire-arms and other weapons, thirty-five objects. Sept. 23, 1896..... ..... (66. 1-30)

Large and fine archaeological series, consisting of stone and flint implements, pottery, pipes, shell and stone beads, etc., many thousands of specimens. Sept. 23, 1896..... ..... (67. 1)

Three war clubs and one pappoose-holder, from the Arapahoe Indians. March 19, 1898..... ..... (122. 1-4)

Central Expanded Metal Co. Fourteen specimens of expanded metal-work, including one globe. Dec. 15, 1896..... ..... (91. 1-15)

Century Company, New York, N. Y. Series of drawings, plates, proofs, etc., illustrating the making and printing of wood-cuts and half-tone pictures. Includes sixteen drawings by noted artists. Oct. 15, 1896..... .... (77. 1-53)

Chalfant, Rev. Frank H., China. Large collection of Chinese "cash" or coins, comprising a series extending from a very ancient period to the present time, three hundred and fifty-six specimens; also two Chinese books on Numismatics. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... .... (24. 1-358)

Clapp, Geo. H., Pittsburgh, Pa. Collection of land and fresh-water shells, about five hundred named species, represented by nine hundred and fifty specimens.* June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... .... (22. 1-500)

Nautilus pompilius, section of shell and animal in alcohol. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (23)

Crawford, R. M., Pittsburgh, Pa. Trap-door spider and its nest. Nov. 15, 1897..... .... (114. 1-2)

Crocker, E. E., Pittsburgh, Pa. Large fossil plant from railroad cut near Titusville, Pa. Nov. 7, 1896..... ..... (87)

Daggett, Clair, Pittsburgh, Pa. Seven birds'-nests. Nov. 12, 1896. (90. 1-7)

Daughters of the American Revolution, Pittsburgh Chapter. Historical collection of thirty-four objects and four photographs. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh.... (21. 1-38)

De Puy, Dr. Hiram, Pittsburgh, Pa. Thirteen historical relics, including seven relics of the railroad riots of July, 1877, sword and scabbard used in the war of 1812, dagger and sheath, piece of wood and spike from the "Lawrence," and two bullets. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (27. 1-13)

Archaeological specimens, including one Roman amphora, nineteen cards, with two hundred and sixty-five flint implements, pipes, bones, teeth, etc., sixty-eight fragments of bone and teeth, one flint and thirty stone implements; in all, three hundred and sixty-four objects. The Indian implements were mostly obtained from burial-places near Pittsburgh. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... ..... (28. 1-364)

Seventy-two minerals and gems. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... .... (29. 1-72)

Thirty-eight fossils and one cast of mammoth's tooth. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh.... ..... (30. 1-39)

Redwood bark and cone, and section of lignum-vitae. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (31. 1-3)

Five skulls of mammalia, bison's horn, tail of beaver, piece of wood gnawed by beaver, six barnacles and weapon of saw-fish. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh.... (32. 1-15)

Fischer, Dr. Erwin, Pittsburgh, Pa. Python's skin and crown of elephant's tooth.* June 1, 1896, Transf. by Ac. of Sc. and Art. of Pittsburgh. (20. 1-2)

Fitzsimmons, George, Pittsburgh, Pa. Sixteen photographs of scenes in the oil regions.* June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... .... (19. 1-16)

Forrester, H. A. Four geological specimens.* June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (25. 1-4)

Fulton, D. L., Allegheny, Pa. Birds, forty-four, collected at Santarem, on the Amazon, by Mr. Fulton.* Mounted and named. Oct. 15, 1896..... .... (78. 1-44)

Gretton Bros., Pittsburgh, Pa. Borings from an oil well.* June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (45)

Hamilton, S., Pittsburgh, Pa. Indian work from Alaska* Oct. 12, 1897. (107. 1-10)

Hanna, W. P., Pittsburgh, Pa. Large collections of minerals, gems, amulets, intaglios, figurines, idols, pottery, weapons, articles of dress, shells, etc., collected in the East, six hundred and sixty-seven specimens; others added in October, 1896. Sept. 17, 1896. (63. 1-700)

Large geological specimen from West Virginia. Jan. 29, 1898. (117)

Harper, Thos., Bellevue, Pa. Large archaeological collection, consisting of stone and flint implements, pottery, bronze objects, beads, etc., from various countries, in all, eleven hundred and twenty-eight objects. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh. (18. 1-1128)

Hart, Mrs. C. J., Lisbon, Portugal. Two war clubs from West Africa.* Nov. 1, 1896..... .... (80. 1-2)

Havens, John A., Pittsburgh, Pa. Pitcher, a relic of the "log cabin and hard cider" campaign of W. H. Harrison, 1840. March 2, 1898. (118)

Heeren Bros. & Co., Pittsburgh, Pa. Collection illustrating the manufacture of jewelry, two hundred and thirty objects. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (17. 230)

Heinz, H. J., Allegheny, Pa. Egyptian mummy, with glass case. Feb. 27, 1896..... .... (97)

Henrici, J. F., Pittsburgh, Pa. Two old-style microscopes, one of them presented by Linnæus to Jussieu. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... .... (16. 1-2)

High School Naturalists' Club, Pittsburgh, Pa. Collection of serpents of Allegheny Co., twenty-two specimens. June 1, 1896.. (55. 1-22)
Seven crustaceans and one squid, from Buzzard's Bay, Mass. Nov. 2, 1896..... .... (81. 1-8)

Holland, Dr. W. J., Pittsburgh, Pa. Collection of Japanese pottery, fifteen objects.* June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... .... (15. 1-15)

One hundred and twelve cases of butterflies and moths, also eight cases of other insects and Arachnida.* Nov. 3, 1896..... (82. 1-120)
Series of lithographic plates, impressions, tools, etc., illustrating lithography. Nov. 3, 1896..... .... (83. 1-22)

Collection of butterflies and other insects, five thousand specimens. Oct. 12, 1897..... .... (110. 1-5,000)

Hunt, Capt. A. E., Pittsburgh, Pa. Two suits of Japanese armor.* (Subsequently purchased.) Dec. 15, 1896..... ..... (92. 1-2)

Hunter, Rev. S. A., Pittsburgh, Pa. Japanese musical instrument, known as a "koto," also silk case for same. March 2, 1898... (119. 1-2)

Huntington, Holland, Pittsburgh, Pa. Two carved canes made by Mexican Indians.* Nov. 4, 1896..... (85. 1-2)

International Navigation Co., New York City, N. Y. Three large models of ocean steamships, with glass cases.* Nov. 1, 1896.... (79. 1-3)

Jilson, Prof. B. C., Pittsburgh, Pa. Four photographs and one map, illustrating local geology.* June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh, Pa.... ..... (14. 1-4)

Johnson, Capt. Jas. R., Clarksville, Tenn. Indian pottery, flint and stone implements collected by Capt. Johnson and his son, H. L. Johnson, of Clarksville, Tenn.; four hundred and eight items, comprising seven hundred and fifty-eight objects. March 17, 1898. (121. 1-408)

Keenan, T. J., Pittsburgh, Pa. Cuban (Independent) flag, and two Cuban machetes. Aug. 21, 1896..... ..... (60. 1-3)

Klages, E. A. & S. M., Crafton, Pa. Nineteen cases North American coleoptera, including a very fine series from Allegheny county, Pa.* Sept. 23, 1896.... .... (69. 1-19)

Klages, Henry G., Jeannette, Pa. Eighty drawers containing about twelve thousand named species of coleoptera, native and exotic, represented by forty thousand specimens.* Oct. 15, 1896..... (72. 1-80)

CALIFORNIAN CONDORS AND TURKEY BUZZARDS ABOUT THE CARCASS OF A DEAD WAPITI.

Mounted by F. S. Webster.

Koenig, Adolph, Pittsburgh, Pa. Sword, with scabbard and fragment of cannon-ball, found near old Fort Pitt. Oct. 3, 1896.... (70. 1-3)

Laird, W. M., Pittsburgh, Pa. Nest of white-faced hornet.* Nov. 10, 1896..... .... (89)

Lane, L. R., East Brady, Pa., Stone and flint implements collected at Brady's Bend, Pa., three hundred and eighty-five specimens.* Aug. 20, 1896..... .... (59. 1-385)

Lavin, M. J., Pittsburgh, Pa. Unio shells and pearls.* June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (11. 1-50)

Lytle, Miss Elizabeth, Hazelwood, Pa. Three old newspapers. Oct. 12, 1897..... .... (108. 1-3)

Macbeth, G. A., Pittsburgh, Pa. A very fine series of ancient and modern glassware, fifty-eight pieces. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh.... .... (13. 1-58)

Mack, Mrs. S. J., Pittsburgh, Pa. Twenty-seven old bank and Confederate bills. Jan. 29, 1898..... .... (116. 1-27)

Mann, H. F., Pittsburgh, Pa. Three models of the first "Harvester" machines. Oct. 12, 1897..... .... (106. 1-3)

McClelland, Dr. T. H., Pittsburgh, Pa. Frame containing three geological photographs.* June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... .... (12. 1-3)

Mellor, C. C., Pittsburgh, Pa. Twelve Chinese objects, consisting of various articles of wearing apparel, etc., and one filter-pipe. Oct. 12, 1897..... .... (111. 1-12)

Old spinning-wheel. Oct. 12, 1897..... ....(112)

Melvin, Harry, Pittsburgh, Pa. Seven archaelological specimens.* Sept. 23, 1896..... .... (68. 1-7)

Milnor, Mrs. C. G., Pittsburgh, Pa. One glass sponge. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (10)

Morse, E. K., Pittsburgh, Pa. Collection from Australia, etc., including skins of birds and mammalia, eggs, arms, articles of dress, etc.; in all, two hundred objects. Sept. 17, 1896..... (61. 1-200)

Collection of Indian stone implements, about three hundred and fifty specimens. Sept. 17, 1896..... ..... (62. 1-350)

Indian pipe. May 5, 1897..... ..... (99)

Moye, Chas. J., Pittsburgh, Pa. Seven specimens of amber.* July 1, 1896. (56. 1-9)

Neville, Arthur, Pittsburgh, Pa. Head of a caribou from Newfoundland.* Jan. 22, 1897..... .... (93)

Oakley, Mrs. Imogen, Pittsburgh, Pa. Three large pictures, portrait, small engraving, certificate of membership in the Philosophical Society, signed by Benjamin Franklin, letter signed by Baron Steuben. July 15, 1897..... .... (103. 1-7)

Ogden, J. G., Pittsburgh, Pa. Thirty fossils.* June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (9. 1-30)

Pittsburgh Amateur Photographers' Society. Fifty-five frames, with photographs.* Nov. 4, 1896.. ..... (86. 1-55)

Twenty-eight frames, containing eighty-eight photographs.* June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh.... (8. 1-88)

Prentiss, W. T., Pittsburgh, Pa. Four specimens of cements. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (7. 1-4)

Pure Food Society, Pittsburgh, Pa. Thirty-three jars of food products. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh. (6. 1-33)

Rankin, Thomas, Rankin, Pa. Four cases of birds and an eagle-skin robe.* Oct. 15, 1896..... .... (71. 1-5)

Rhine, D., Pittsburgh, Pa. Model of sectional canal boat used on the Portage railroad, Aug. 7, 1897..... ..... (104)

Rode, G. W., Pittsburgh, Pa. Collection of two hundred and twenty-eight coins and medals, including many rare and unique specimens. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh. (5. 1-228)

Rodkey, W. B., Pittsburgh, Pa. Chess table of inlaid work, containing about four thousand pieces.* April 15, 1897..... (98)

Ross, A. Marshall, Confluence, Pa. Knapsack, war of 1812, carried by Robert Ross, Second (Zermatts) Ohio Regiment. May 27, 1897. (100)

Scott, John, Pittsburgh, Pa. One tarpon scale. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (4)

Shaw, Joseph, McKee's Rocks, Pa. Cane of hardwood, covered with cord needle-work. May 27, 1897..... (101)

Spangler, Geo. D., Butler, Pa. Three specimens, fossil plants, from Butler Co., Pa. Feb. 27, 1897..... (96. 1-3)

Herbert H. Smith, Pittsburgh, Pa. Collection of shells, about three thousand species, represented by fifteen thousand specimens.* (Subsequently purchased.) June 1, 1896..... (46. 1-3000)

Small ethnological collection from Brazil.* June 1, 1896. (47. 1-25)

About three hundred scientific pamphlets and books.* (Subsequently donated.) June 1, 1896..... ..... (48. 1-300)

Collection of Brazilian galls, about one thousand specimens.* June 1, 1896..... .... (49. 1-1000)

Collection of insect architecture, wasps' nests, etc., from Brazil.* June 1, 1896..... .... (50. 1-500)

Collection of Brazilian fruits and seeds, about five thousand specimens.* June 1, 1896..... ..... (51. 1-5000)

Collection of spiders and myriapods from Brazil and the United States, about twelve hundred species and twenty thousand specimens.* June 1, 1896..... .... (52. 1-1200)

Collection of insects from the State of New York, about five thousand species, represented by thirty thousand specimens.* June 1, 1896..... .... (53. 1-5000)

Collection of insects from Brazil, Paraguay, etc., embracing at least thirty thousand species, represented by over one hundred and fifty thousand specimens.* June 1, 1896..... (54 1-30000)

Southern R. R. Co. (through Mr. V. Richards). Twenty-one large specimens of woods.* Oct. 15, 1896.... ..... (75. 1-21)

Smith, Mrs. Herbert H., Pittsburgh, Pa. "Cobweb" lace from Paraguay, and "drawn work" from Ceara, Brazil.* Nov. 3, 1896.... (84. 1-2)

Smith, R. H., Pittsburgh, Pa. Ten old prints. June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... ..... (3. 1-10)

Stewart, Douglas, Allegheny, Pa. Collection consisting of eighteen objects, principally of Egyptian and East Indian manufacture. March 5, 1898..... .... (120. 1-18)

Stupakoff, S. H., Swissvale, Pa. Two glass sponges. June 1, 1896. Transf. by Ac. of Sc. and Art, of Pittsburgh..... (1. 1-2)
Land, fresh-water, and marine shells, in all, 1,742 specimens.* June 1, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh.... (2. 1-1742)

Walker, Clarence, Allegheny, Pa. Twenty-six old letters from various persons prominent in the early settlement of Pennsylvania, among them John Penn, Anna Penn, John Harris, James Hamilton, Justice Shippen, James Bird and Mrs. Benedict Arnold. Old scrip, newspapers, etc. Oct. 12, 1897..... ..... (109. 1-50)

Weldon, Jos. A., Pittsburgh, Pa. Costume of a Sioux Indian warrior, also five photographs of Indian scenes connected with the battle of Wounded Knee. Feb. 5, 1897..... ..... (94. 1-11)

Western University of Pennsylvania, Allegheny, Pa. Nine specimens of corals.* Oct. 15, 1896..... ..... (76. 1-9)

White, Mrs. M. J., Allegheny, Pa. Seventeen phials of seed from the Punjaub, India, collected by Miss Josephine L. White. Nov. 19. (115. 1-17)

Willock, Mrs. J. P., Beaver, Pa. Physician's scales, case of surgical instruments, in use seventy-five years ago. Oct. 12, 1897. (113. 1-2)

Wineland, D. St. Clair, Pittsburgh, Pa. Drum, relic of the American Revolution. Sept. 15, 1897..... .....(105)

Woolslair, C. W., Wilkinsburg, Pa. United States fractional currency, twenty-seven pieces. Feb. 13, 1897..... ..... (95. 1-27)

Worth, Chas., Pittsburgh, Pa. Chinese seal and piece of Chinese money. June 15, 1897..... .... (102. 1-2)

Yohe, Isaac, Monongahela City, Pa. Archaeological collection, consisting of stone and flint implements, beads, pipes, Aztec pottery, etc.; in all, fourteen hundred and fifty objects. June 1, 1896. Transf. by Acad, of Sc. and Art, of Pittsburgh..... (26. 1-1450)

Yohe, Harold, Pittsburgh, Pa. Star-fish. Nov. 10, 1896..... (88)

ACCESSIONS TO THE LIBRARY OF THE CARNEGIE MUSEUM,

From June 1, 1896, to April 1, 1898.

(Donated unless otherwise indicated.)

American Association for the Advancement of Science. Proceedings, Forty-fourth Meeting, 1896. Feb. 16, 1897..... ..... (19)

American Iron and Steel Association, Philadelphia, Pa. Six bound volumes on geology. Dec. 9, 1897..... ..... (110. 1-6)

Academy of Science and Art, of Pittsburgh, Pa. "Fresh-water Shell Mounds of the St. John's River, Florida." June 25, 1897..... (33)

Volume V, National Academy of Science. June 25, 1897..... (34)

Two pamphlets on North American Fresh-water Fishes, etc. June 25, 1897..... .... (35. 1-2)

Six pamphlets. June 25, 1897..... ..... (36. 1-6)

"Appalachia," July number, 1891. June 25, 1897..... (38)

"Roentgen Ray Apparatus," "By-laws," etc., of Academy of Science and Art, of Pittsburgh. June 25, 1897..... (39. 1-2)

Academy of Science and Art—Continued.

"Boletin Mensual Meteorologico y Agricola del Observatorio Central del Estado de Vera Cruz Llave." Oct. 31, 1897..... (60)

Bulletin of the Geological Institution of the University of Upsala. Oct. 31, 1897..... .... (62)

Annals of the Magnetic and Meteorological Observatory of the Imperial University at Odessa. Two Parts. Oct. 31,1897..... (63)

Eleven volumes of U. S. Geological Survey. Nov. 1, 1897. (73. 1-11)

"Smithsonian Geographical Tables." Nov. 1, 1897..... (74)

"Second Report of the State Zoologist of Minnesota," etc. (Pamph.) Dec. 2, 1897..... .... (97)

Seven Pamphlets. Dec. 2, 1897..... ..... (98. 1-7)

Eight Bulletins of U. S. Geological Survey. Nov. 27, 1897. (89. 1-8)

"Proceedings of the American Association for the Advancement of Science." Dec. 2, 1897..... ..... (94)

Four pamphlets from Field Columbian Museum. Dec. 2, 1897. (99. 1-4)

Two odd numbers of magazines. Dec. 4, 1897..... (103. 1-2)

"Exhibit of the Smithsonian Institution at the Cotton States Exhibition," pamphlet, and one number of "The Auk." Dec. 11, 1897. (114. 1-3)

Proceedings of the Academy of Natural Sciences of Philadelphia, 1888-1897, thirty-six numbers. Dec. 11, 1897..... (112. 1-36)

Four pamphlets on "Fishes and Their Parasites," catalogue of Australian birds, "Birds of Hawaiian Islands," Report of the State Zoologist of Minnesota. Dec. 11, 1897..... (113. 1-4)

Twelve volumes "Smithsonian Contributions to Knowledge." Dec. 21, 1897..... .... (129. 1-12)

Farmers' Bulletin, No. 66, from U. S. Department of Agriculture. Jan. 3, 1898..... .... (131)

"Annuario del Observatorio Astronomico Nacional de Tacubaya," 1898. Jan. 20, 1898..... ..... (138)

"Boletin Mensual Meteorologico y Agricola del Observatorio Central del Estado de Vera Cruz Llave." (Pamphlet.) Jan. 20, 1898. (140)

Bulletins of the Wilson Ornithological Chapter of the Agassiz Association, Oberlin, O., Nos. 15, 16, 17 and 18; Laboratory Bulletin, No. 8. March 19, 1898..... ..... (149. 1-5)

Two pamphlets: "Boletin Mensual Meteorological y Agricola del Observatorio Central del Estado de Vera Cruz Llave," Sept., '98, Oct., '98. March 19, 1898..... ..... (150. 1-2)

Academy of Natural Sciences, Philadelphia, Pa. Manual of Conchology, First Series, fifteen volumes; Second Series, ten volumes. Purchased. Oct. 10, 1897..... (52. 1-25)

Manual of Conchology, First Series, Parts 41 and 42; Second Series, Parts 65 and 66. Purchased. Oct. 17, 1897..... (58. 1-4)

Baker, Frank C., Chicago, Ill. Eleven papers on Mollusca. Nov. 1, 1897..... (77. 1-11)

Boggs, John C., Shousetown, Pa. Two volumes Report U. S. Department of Agriculture. Feb. 21, 1898..... (146. 1-2)

Carnegie Library, Pittsburgh, Pa. Six volumes of Second Geological Survey of Pennsylvania. Dec. 8, 1897..... (105. 1-6)

Clapp, Geo. H., Pittsburgh, Pa. List of the Mollusca of Allegheny County (MS.). Aug. 26, 1896..... (2)

Binney's "Manual of American Land Shells"; Dall's "Instructions for Collecting Shells." Nov. 30, 1896..... (5. 1-2)

"Régles de la nomenclature des êtres organisées" (pamphlet) March 9, 1897..... (24)

Three numbers of Journal of Malacology. Nov. 15, 1897.. (81. 1-3)

"Synopsis of the Acridiidæ of North America," from U. S. Geographical Survey of the Territories. Nov. 15, 1897..... (82)

Catalogue and list of land and fresh-water shells, etc. Nov. 15, 1897..... (83)

Catalogue of specimens of Mollusca for sale by Ward, with supplements 1, 2 and 3. Nov. 15, 1897..... (84. 1-4)

Deming, J. L., Bellevue, Pa. Two ornithological pamphlets. Jan. 28, 1897..... (11. 1-2)

History of the United States Mints and American Coinage. Nov. 1, 1897..... (76)

Field Columbian Museum, Chicago. "Contribution II. to the Coastal Flora of Yucatan," by C. F. Millspaugh; "Catalogue of a Collection of Birds obtained by the Expedition into Somali-land," by D. G. Elliott. Feb. 2, 1897..... (12. 1-2)

"Observations on Popocatapetl and Ixtaccihautl (Geological Series, Vol. I., No. 2)," by Oliver C. Farrington, Ph. D. June 25, 1897. (42)

"Archaeological Studies Among the Ancient Cities of Mexico" (Anthropological Series, Vol. I., No. I., Part 2), by Wm. H. Holmes. June 25, 1897..... (43)

List of Mammals from Somali-land, etc. (Zoological Series, Vol. I., Nos. 6 and 7), by D. G. Elliott. July 28, 1897..... (44. 1-2)

"List of Fishes and Reptiles of East African Expedition," "Annual Report of Director," etc. Dec. 21, 1897..... (128. 1-2)

Pamphlet "On a Collection of Birds from Somali-land." Dec. 21, 1897..... (130)

Foote, A. E., Philadelphia, Pa. "A Complete Catalogue of Minerals." Jan. 3, 1898..... .... (133)

Ford, Hon. H. P., Pittsburgh, Pa. Catalogue of the Cumberland Museum, England. Oct. 31, 1897..... .... (64)

Gresley, W. S., Erie, Pa. Seven geological pamphlets and five plates, giving in detail section of the Pittsburgh Coal Basin. Nov. 13, 1897.. (78. 1-12)

Guttenberg, Prof. Gustave, Pittsburgh, Pa. Lot of pamphlets. June 22, 1896, Transf. by Ac. of Sc. and Art, of Pittsburgh..... (1. 1-25)

Hamilton, Dr. John, Allegheny, Pa. (Bequest through Dr. W. J. Holland, Testamentary Trustee.) Entomological library, consisting of two hundred and nineteen bound volumes and one hundred and thirty-one pamphlets and separata. Sept. 1, 1897..... (50. 1-350)

Hamilton, Wm., Allegheny, Pa. Twenty-seven volumes of Second Geological Survey of Pennsylvania; six volumes Reports, Agriculture of Pennsylvania; one volume Report, Fisheries of Pennsylvania; three volumes U. S. Fish Commissioners; one volume U. S. Geological Survey; sixteen volumes U. S. Department of Agriculture Reports; sixteen volumes of Miscellaneous Reports. Dec. 18, 1897. (126. 1-70)

Harper, Thomas, Bellevue, Pa. Eleven pamphlets relating to bibliography, etc. Nov. 19, 1896..... ..... (4. 1-11)

Hart, W. W., Pittsburgh, Pa. Copy of "Recreation." Dec. 9, 1897. (107)

Hay, Dr. O. P., Chicago, Ill. Three scientific pamphlets. Nov. 30, 1896. (6. 1-3)

"Reprint from the Zoological Bulletin." Dec. 9, 1897..... (6.4)

Hayes, Ed. F., Pittsburgh, Pa. Report of State Commissioners of Fisheries, Penna., and Report of Department of Agriculture. Nov. 27, 1897..... .... (88. 1-2)

Holland, W. J., Pittsburgh, Pa. Seven conchological catalogues and two pamphlets on conchology and geology. Nov. 27, 1897... (90. 1-9)

Iron City Microscopical Society, Pittsburgh, Pa. Three Bulletins from Division of Chemistry, U. S. Department of Agriculture; four Bulletins of the U. S. National Museum and two pamphlets. Nov. 1, 1897..... .... (71. 1-9)

Five papers from the U. S. National Museum on "Directions for Collecting and Preserving Insects, Recent and Fossil Plants, Birds and Birds' Eggs and Nests and Rough Skeletons." Nov. 1, 1897. (72. 1-5)

Iron City Microscopical Society—Continued.

Two pamphlets on "Instruction for Collecting Mollusks, Reptiles and Batrachians." Dec. 2, 1897..... ..... (101. 1-2)

Thirty-five volumes of U. S. Geological Survey; ten volumes of Smithsonian Reports. Dec. 11, 1897..... (115. 1-45)

Three Bulletins of the U. S. National Museum; Part I., Hayden's Survey of the Territories; "Fishes of Sinaloa." Dec. 11. (116. 1-5)

Five Bulletins. Dec. 11, 1897..... ..... (117. 1-5)

Eight pamphlets on "Food and Food Adulterants"; Scientists' Directory for 1894. Dec. 11, 1897..... (118. 1-9)

Ten pamphlets: "Experiments from Sorghum, Sugar and Sugar Beets"; three pamphlets on "Food Products"; two Bulletins, Department of Agriculture; Farmers' Bulletin, No. 15; Report of Assistant Pomologist, 1893. Dec. 11, 1897..... (119. 1-10)

Keeler, Prof. J. E., Allegheny, Pa. U. S. Geological Survey, eight volumes. Dec. 9, 1897.... .... (111. 1-8)

Kerbey, Major Orton, Wilmore, Pa. Pamphlet on "Florida Rubber Culture Co." and "Review of Reviews" for July, 1895. Dec. 2, 1897..... .... (102. 1-2)

Killikelly, Miss S. H., Pittsburgh, Pa. Seven archaeological pamphlets. Jan. 28, 1897..... .... (9. 1-7)

Krauss, T. H., Indianapolis, Ind. Seven Annual Reports of the Bureau of Ethnology. Purchased. Dec. 1, 1897..... (92. 1-7)

Lee, A. Y., Swissvale, Pa. Map of Luray Cave. June 25, 1897.... (28)

Margerum, J. Shan, Washington, Pa. Catalogue of curios. Jan. 28, 1897..... .... (10)

McConnell, E. M., New Castle, Pa. Second Geological Survey of Pennsylvania, eighty volumes; California Geological Survey, one volume. Oct. 17, 1896..... .... (3. 1-81)

Mellor, C. C., Pittsburgh, Pa. Bulletin of the U. S. National Museum, No. 48; three Reports of the Peabody Museum; three pamphlets on Birds, etc. Dec. 2, 1897..... ..... (95. 1-7)

Twelve bound volumes: U. S. Geological Exploration of the 40th Parallel, Vol. V, Botany; Natural History of New York, Part II. Vol. I., Botany, by J. Torrey; Natural History of New York, Part II., Vol. II., Botany, by J. Torrey; U. S. Geographical Surveys West of the 100th Meridian, by G. M. Wheeler, Vol. II., Botany; U. S. Geographical and Geological Surveys of the Territories of Wyoming and Idaho, Part I.; U. S. Geographical and Geological Surveys of the Territories of Wyoming and Idaho, Part II.; Annual Report of the Bureau of Ethnology, Powell, 1880-81; U. S. Geological Survey of the Territories, by Hayden, "Fresh-Water Rhizopods of North America"; Report on the Botany of the Expedition of Explorations and Surveys for a Railroad Route from the Mississippi to the Pacific (in three volumes); A Naturalist in Mexico. Nov. 1, 1897..... .... (66. 1-12)

Mellor, C. C.—Continued.

Eight pamphlets, 10th, 11th, 12th and 13th Annual Reports of the Trustees of the Peabody Museum, three volumes; Bulletin of the U. S. National Museum, No. 25; 11th Annual Report of the American Museum of Natural History; Catalogue of Exhibits of the New York Academy of Sciences; "The Circular, Square and Octagonal Earthworks of Ohio"; "The Problem of the Ohio Mounds." Nov. 1, 1897..... .... (67. 1-8)

Six pamphlets, two catalogues, and guide to Field Columbian Museum. Nov. 1, 1897..... .... (68. 1-9)

Five separata on Mammalia, and "Contributions to Zoology of Tennessee," by S. N. Rhoads. Nov. 1, 1897..... ..... (69. 1-5)

Archaeological pamphlet, four pamphlets from the Board of Education of New York City, two pamphlets from the Bureau of Ethnology, and Bulletin of U. S. National Museum. Nov. 1, 1897. (70. 1-8)

"Contributions from U. S. National Herbarium"; "Animals Recently Extinct, etc., as Represented in the U. S. National Museum"; "Summer Birds of Indiana and Clearfield Counties, Pa." Jan. 3, 1898..... .... (134. 1-3)

"Notes on Living and Extinct Species of North America Bovidae." (Pamphlet.) Jan. 24, 1898..... ..... (141)

"On Iron Meteorites," etc., pamphlet. Jan. 29, 1898..... (143)

Proceedings Academy of Natural Sciences, Philadelphia, Pa., 1897, Part III. March 7, 1898..... ..... (147)

Moore, Clarence B., Philadelphia, Pa. "Certain Sand Mounds of Duval County, Florida," "Two Mounds on Murphy Island, Florida," "Certain Sand Mounds of the Ocklawaha River, Florida." June 25, 1897..... .... (29. 1-3)

"Certain Sand Mounds of the St. John's River, Florida," Part I., by C. B. Moore; "Earthenware of Florida," by W. H. Holmes. June 25, 1897..... .... (30. 1-2)

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"Crania from the Mounds of the St. John's River, Florida"; "Certain Shell-heaps of the St. John's River, Florida." June 25, 1897. (32)

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"Inhumation and Incineration in Europe," by the Marquis de Nodaillac. From Journal of the Academy of Natural Sciences, of Philadelphia. Sept. 1, 1897..... ..... (49)

"Additional Mounds of Duval and of Clay Counties, Florida"; "Mound Investigation on the East Coast of Florida"; "Certain Florida Coast Mounds North of the St. John's River." Nov. 1, 1897..... .... (75)

Morgan, Miss Caroline L., Pittsburgh, Pa. Annual Report of the Bureau of Ethnology, 1879-80. Nov. 22, 1897..... (86)

Museum of Comparative Zoology, Cambridge, Mass. Seventeen "Memoirs of the Museum of Comparative Zoology," one hundred and forty-four Bulletins and five catalogues of the Museum. Dec. 11, 1897..... (123. 1-166)

Oberlin College Library, Oberlin, Ohio. Two Bulletins of the Wilson Ornithological Chapter of the Agassiz Association. June 25, 1897. (27. 1-2)

Bulletin No. 13 of the Wilson Ornithological Chapter of the Agassiz Association (General Notes); Laboratory Bulletin No. 6 (a preliminary list of the Birds of Okanogan County, Washington). June 25, 1897..... (41. 1-2)

"Summaries in Systematic Zoology" (pamphlet). Dec. 9, 1897. (108)

Peabody Museum of Archaeology and Ethnology, Cambridge, Mass. "Memoirs," Vol. I., No. 2, Thompson; "Cave of Loltun, Yucatan." July 31, 1897..... (46. 1-2)

"The Chultunes of Labna, Yucatan," by Edward H. Thompson. Nov. 15, 1897..... (80)

Pflaum, Magnus, Pittsburgh, Pa. "Birds of Pennsylvania." Dec. 1, 1897..... (91)

Phillips, Henry, Pittsburgh, Pa. Rees' Encyclopaedia (45 volumes); Treatise on Chemistry (3 volumes); Survey of the Territories (3 volumes); Report of Commissioner of Labor (one volume). Dec. 2, 1897..... (93. 1-53)

Pilsbry, Prof. Henry A., Philadelphia, Pa. "New Species of Freshwater Molluscs from South America," "New Species of Molluscs," Feb. 28, 1897..... (20. 1-2)

Portland Society of Natural History, Portland, Me. Three pamphlets "Proceedings of the Portland Society" and the "Portland Catalogue of Maine Plants." Dec. 15, 1897..... (124. 1-3)

Shafer, John A., Carnot, Pa. Three pamphlets on mineralogy. June 25, 1897..... (37. 1-3)

Geological Survey of Pennsylvania (First Survey, complete in two volumes); Second Geological Survey of Pennsylvania, one volume; Geological Survey of Ohio, Vol. II.; Report on the Geology of Lake Superior, Part II. Dec. 15, 1897..... (125. 1-5)

Twenty pamphlets: "Monthly Catalogue Government Publications" (Feb., 1895—Sept., 1896). Jan. 11, 1898..... (136. 1-20)

Smith, Herbert H., Pittsburgh, Pa. Ninety-four scientific pamphlets. Dec. 14, 1896..... .... (8. 1-94)

Westwood's "Classification of Insects"; Jay's "Catalogue of Shells"; Burmeister's "Manual of Entomology," and about one hundred pamphlets. Dec. 11, 1897..... ..... (121. 1-103)

"Revision of the Orthopteran Group (Melanopli)," etc., by S. H. Scudder. Jan. 3, 1898..... .... (132)

Pamphlet, "New Species of Coleoptera of the Family Chrysomelidae, with a Short Review of the Tribe Chlamydini," by M. L. Linell. 1897. Jan. 12, 1898..... ..... (137)

Bulletin of the American Geographical Society, No. 4, 1897. Jan. 24, 1898..... .... (142)

Pamphlet and separatum: "Gypsy Moth in America," by L. O. Howard; "Corrected Index to Bulletin No. 7, Technical Series." Jan. 29, 1898..... .... (144. 1-2)

Very rare pamphlet (O Mytho do Curupira). March 8, 1898.. (148)

U. S. GOVERNMENT PUBLICATIONS.

Department of Agriculture, Washington, D. C. Bulletin No. 7, Division on Entomology, "Some Miscellaneous Results of the Work of the Division of Entomology." Feb. 3, 1897..... (14)

Henshaw's "Bibliography of the More Important Contributions to American Economic Entomology," Part V. Feb. 10, 1897.. (16)

"Insects Affecting Domestic Animals," by Herbert Osborn. Feb. 11, 1897..... .... (17)

Farmers' Bulletin, No. 45, "Some Insects Injurious to Stored Grain," by F. H. Chittenden. Feb. 28, 1897..... (21)

"A Study of Insect Parasitism," by Howard; "Some Little Known Insects Affecting Stored Vegetable Products," by Chittenden. April 5, 1897..... .... (25. 1-2)

Contributions from U. S. National Herbarium, Vol III., No. 8. June 25, 1897..... .... (40)

"The San Jose Scale and Its Nearest Allies." July 29, 1897.. (45)
Four pamphlets on entomology. Dec. 11, '97..... (120. 1-4)

Librarian of the Congressional Library, Washington, D. C. Check-List of Public Documents. Nov. 13, 1897..... (79)

National Museum, Washington, D. C. "Description of two Species of North American Coleoptera," by Martin L. Linell. From Proceedings of U. S. National Museum, Vol. XIX. Feb. 11, 1897. (18)

National Museum—Continued.

"Food Plants of Scale Insects (Coccidae)," by T. D. A. Cockerell. July 31, 1897..... ..... (47)

Revision of the Tachinidae of America North of Mexico," by D. W. Coquillet. Oct. 8, 1897..... ..... (51)

"Insects Affecting the Cotton Plant," by L. O. Howard. Oct. 17, 1897..... .... (55)

"Some Insects Injurious to Stored Grain," by F. H. Chittenden. Oct. 17, 1897..... .... (56)

"Bee-keeping," by Frank Benton. Oct. 17, 1897..... (57)

"Directions for Collecting and Preserving Scale Insects (Coccidae)," by T. D. A. Cockerell. Oct. 15, 1897..... (53)

"Important Insecticides," by C. L. Marlatt. Oct. 17, 1897.... (54)

"Proceedings of the Ninth Annual Meeting of the Association of Economic Entomologists." Oct. 31, 1897..... (59)

"On the Insects Collected by Dr. Abbott on the Seychelles, Aldabra, Gloriosa and Providence Islands," etc., by Martin L. Linell. Oct. 31, 1897..... .... (61)

"Grasses and Forage Plants of Iowa, Nebraska and Colorado," by L. H. Pammel. Nov. 1, 1897..... ..... (65)

Smithsonian Miscellaneous Collections, Vol. II. Nov. 15, 1897. (85)

A number of pamphlets on "Museums of the Future." Dec. 2, 1897.... .... (100. 1-5)

Three pamphlets and paper on "Report of Condition and Progress of the U. S. National Museum," "Genesis of the U. S. National Museum," "Principles of Museum Administration." Dec. 11, 1897. (122. 1-4)

Two copies "Smithsonian Report," 1890. Dec. 20, 1897.. (127. 1-2)

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Smithsonian Institution, Washington, D. C. Annual Report to July, 1894. Feb. 3, 1897..... ..... (13)

Dall's "Instructions for Collecting Mollusks," Steineger's "Directions for Collecting Reptiles and Batrachians," Ridgway's "Directions for Collecting Birds," Riley's "Directions for Collecting and Preserving Insects." Feb. 5, 1897..... (15. 1-4)

Uhler's "Summary of the Hemiptera of Japan," Ashmead's "Descriptions of New Cynipidous Galls and Gall Wasps." From Proceedings of U. S. National Museum, Vol. XIX. March 1, 1897. (22. 1-2)

Coville's "Directions for Collecting Specimens and Information Illustrating the Aboriginal's Uses of Plants." March 5, 1897. (23)

Smithsonian Report for 1895. May 17, 1897..... (26)

Superintendent of Documents, Washington, D. C. Fourteen pamphlets, "Monthly Catalogue of U. S. Publications," Nov., 1896—Dec., 1897. Jan. 20, 1898..... ..... (139. 1-14)

University of Chicago Press, Chicago, Ill. "Photometry of a Lunar Eclipse" (pamphlet). Dec. 9, 1897..... (109)

Walker, Dr. R. L., Carnegie, Pa. "Ruminantia," "Fossil Animals," "The Hunting Field," and "Second Report of the State Geologist." Dec. 14, 1896..... .... (7. 1-4)

Seven bound volumes: Smithsonian Reports, Bulletin of U. S. Fish Commission, Report of State Commissioners of Fisheries; Agriculture of Pennsylvania. Nov. 26, 1897..... (87. 1-7)

"Second Report of the State Zoologist of Minnesota," etc. Dec. 2, 1897..... .... (96)

Warren, B. H., Harrisburg, Pa. A number of pamphlets on "Taxidermy and the Game and Fish Laws of Pennsylvania." Dec. 4, 1897. (104. 1-4)

Webster, Frederic S., Pittsburgh, Pa. Year-book of U. S. Department of Agriculture, 1895. Feb. 21, 1898..... (145)

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Publications of the Carnegie Museum: No. 5

THE CARNEGIE MUSEUM

PITTSBURGH

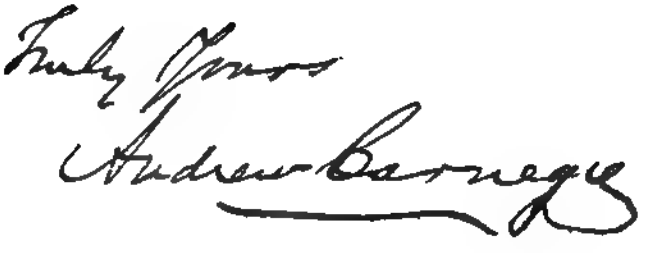
13

ANNUAL REPORT OF THE DIRECTOR

FOR THE

YEAR ENDING MARCH 31, 1899

1899



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Publications of the Carnegie Museum: No. 5.

THE CARNEGIE MUSEUM

PITTSBURGH

ANNUAL REPORT OF THE DIRECTOR

FOR THE

YEAR ENDING MARCH 31, 1899.

1899

MURDOCH-KERR PRESS,
PITTSBURGH.

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DIRECTOR.

W. J. HOLLAND, Ph. D., LL. D., et

LETTER OF TRANSMITTAL.

MR. C. C. MELLOR,

Chairman of the Committee on the Museum of the Board of Trustees of the Carnegie Institute.

DEAR SIR:

I have the honor herewith to submit to you my second annual report as Director of the Carnegie Museum.

Appended to the report is the financial statement for the fiscal year ending March the 31st, 1899. I also include in my report a list of the accessions which have taken place during the past year. These accessions are arranged under the names of the various donors or lenders in alphabetical order.

Please accept on behalf of myself and my colleagues on the staff of the Museum our sincere thanks for the uniform courtesy and considerate treatment which we have received during the past year from the Committee of which you are the Chairman and from the Board of Trustees.

Very respectfully,

W. J. HOLLAND,
Director.

Carnegie Museum, April 1st, 1899.

ANNUAL REPORT UPON THE CONDITION AND PROGRESS OF THE CARNEGIE MUSEUM IN PITTSBURGH.

Submitted April 1st, 1899,

By W. J. Holland, Director.

The work entrusted to those who are in charge of the Carnegie Museum has gone on without interruption during the past year. Without exception the members of the force engaged in the various departments have enjoyed the blessing of continuous health, and therefore no time has been lost. The efforts of those on behalf of whom I have the pleasure of speaking have been characterized by uniform fidelity and enthusiasm, and in casting a retrospective glance over the year that is ended we cannot fail, I think, to be impressed with the thought that it has been a year marked by much successful effort.

Considerable additions have been made to the collections contained in the Museum, and through the skillful labors of those who have been employed in the department of preparation much of this material has been made available for purposes of study. Pleasant relations have been established with a number of kindred institutions, and we have the satisfaction of knowing through direct personal intercourse with representatives of some of the foremost institutions of the times both in this country and abroad that the work which has been done is of a character which meets with approval. We feel that we are not violating the maxims of a proper modesty when we assert that the museum which we have the honor of serving is rapidly coming to be recognized as one of the important institutions of its class in the United States.

The work of creating a museum which shall properly fulfill its functions is a work not only of great magnitude but of great difficulty. The innumerable details of administration and the importance at the same time of so controlling all details that the great end of popular and scientific instruction may be promoted,

call for unwearying diligence and no small amount of philosophical consideration. Loose and haphazard methods must be rigidly excluded. With almost a limitless field before us, it requires great firmness to avoid digressions into fields which are inviting, and at the same time much careful thought in selecting lines of work which promise to be in the highest degree productive of good. The Museum is constantly receiving donations from various sources, many of which we are constrained to accept out of regard to the kind wishes of the donors, but which cannot immediately be made available in any well planned scheme of exposition. These objects will all ultimately prove useful and in many cases are valuable. Ingenuity is, however, at times sorely taxed in assigning a proper location to the very miscellaneous objects which come to us.

THE STAFF.

The staff of the Museum, as at present constituted, consists, in addition to the Director, of Mr. J. A. Shafer, Mr. E. B. Williamson, and Mr. Douglas Stewart, Curators; Mr. F. S. Webster, in charge of the Department of Preparation; Mr. Theodore A. Mills, Sculptor and Modeler in the Department of Ethnology; Mr. Gustav Link, Assistant in the Department of Preparation; Mr. Harry C. Watson, Apprentice in the Department of Preparation; Miss M. J. Stribling, Stenographer. During the past year the Museum has also employed for some length of time Mr. S. N. Rhoads and Mr. W. E. Clyde Todd as field collectors, and for six months Mr. Wm. Harvey Brown, formerly of the United States National Museum, as Preparator in the Department of Osteology. Mr. Brown's engagement terminates at this date, as he is about to return to South Africa, where he intends to make his home. Important assistance has from time to time been kindly given by different individuals who are interested in the work of the Museum and who have served voluntarily in arranging collections which they have either donated or in which they are specially interested. Especial recognition should be given in this connection to Magnus Pflaum, Esq., who has assisted in the arrangement of the collection of coins, the larger portion of which was donated by him, to Mr. and Mrs. W. P. Hanna, to Mr. W. C. Burns, and to Mr. Thomas Harper.

In reviewing the accessions of the past year I shall follow the order adopted in my report of the year closing April 1st, 1898.

MAMMALS.

The collection of mammals in the Museum has been considerably increased by the purchase of a number of specimens collected by Mr. W. H. Brown in Mashonaland, South Africa; by a number of specimens secured for us by Mr. Herbert H. Smith in Colombia, South America; by donations received from the Zoological Garden under the care of the Department of Public Works of the City of Pittsburgh; and by specimens of the mammals of Pennsylvania collected for the Museum by Messrs. Rhoads and Todd. Of the Mammalia known to still survive within the limits of our State we have already secured by far the greater number of species, and we hope to be able to report ere long that our collections of the mammals of Pennsylvania are complete and thoroughly representative.

BIRDS.

The various ornithological collections belonging to the Museum have all been arranged and catalogued. Large numbers of the birds of Pennsylvania have been obtained through Messrs. Rhoads, Todd, and Wm. Seager. We are indebted to Mr. Douglas Stewart for two remarkably fine specimens of the white pelican, shot by him on Conneaut Lake and kindly donated to the Museum. The specimens represent the second recorded occurrence of this bird in Pennsylvania. Mr. D. A. Atkinson has made important donations of birds taken in Allegheny county, among them some very rare species. From Herbert H. Smith we have received one hundred and fifty species of South American birds; from Hon. George B. Sennett important collections of the birds of Pennsylvania and Texas. We also purchased from Mr. Sennett his very beautiful collection of birds of paradise. Many of the specimens obtained have been mounted for display, some of them in striking and life-like groups. The collection of birds, while still comparatively a small one, contains much that is very choice, and our purpose to assemble as rapidly as possible a collection of the birds of Pennsylvania, and ultimately of the entire United States, is much nearer realization at this date than it was a year ago. There are at present in the possession of the Museum in the neighborhood of five thousand birdskins, representing approximately one thousand species.

REPTILES AND BATRACHIANS.

The collection of reptiles and batrachians has been rearranged during the past year by Mr. E. B. Williamson and Mr. Shafer. A number of additions representing the local fauna, have been made.

FISHES.

But little progress has been made as yet in this department. We have obtained a number of local species for the collection, but our work is by no means as yet what it ought to be. Time and opportunity have both been wanting to press forward the work of collection in the department of ichthyology.

MOLLUSCA.

Since the departure of Mr. Herbert H. Smith to South America comparatively little work has been done with the collection of Mollusca in the possession of the Museum. A few valuable and important additions have been made, but owing to the lack of any one connected with our force who is thoroughly competent to deal with the already considerable collection which we have, not much progress in this department has been made during the past year. We possess specimens of about one-third of all the species known to science, and a great deal of valuable duplicate material, which might well be employed in enlarging our collection by exchange, but we lack the skilled assistance necessary to accomplish this.

CRUSTACEA.

Mr. E. B. Williamson has arranged our collection of Crustacea and devoted considerable time to the study and collection of the local species. His investigations have shown that the fluviatile and riparian fauna of the region is richer in species than had been suspected, and he has brought together a very interesting assemblage of specimens. The work will be continued during the coming summer.

INSECTS.

The work in this department has largely consisted during the past year in the rearrangement and preparation of collections which had already been amassed by the Museum or which have

been placed under the custodianship of the authorities of the Museum. The Director devoted his summer vacation to the preparation of a work on the Butterflies of North America intended to popularize and extend the knowledge of this subject. Several papers of a monographic character, based upon the collections in the Museum, have been undertaken and will shortly be published. Mr. Williamson has been specially active out of Museum hours in working up the Odonata of the Ohio Valley, and has published one or two interesting papers. The Director is co-operating with Sir George F. Hampson in the great work which he has undertaken under the auspices of the Trustees of the British Museum of preparing a complete illustrated catalogue of the moths of the world, the first volume of which has just been published.

PALÆONTOLOGY.

A very notable addition to our collections in palæontology was made by Mr. Andrew Carnegie in the gift of what is known to be certainly the largest and in many respects one of the most perfect skeletons of the mastodon which has as yet been discovered. The specimen was beautifully mounted by Ward of Rochester, and is a striking and important addition to the fossils which we are assembling. From Mr. Frank Lucock we have received a large and beautiful collection of fossil bivalves from the Edwards Plateau in Texas. Numerous fossils from the Carboniferous formations about Pittsburgh have been presented by various donors. The work of arranging the fossils of the coal flora was entrusted to Mr. Douglas Stewart, and he has completed the work satisfactorily. Through the kindness of Mr. Carnegie a considerable sum of money has been placed at the disposal of the Director with instructions to employ the same in securing for the department of palæontology, if possible, a representative collection of the huge fossils of the Mesozoic period as these are represented in the deposits of some of our Western States. Palæontology has in the past thirty years made more rapid advances through the distinguished labors of American students than almost any other branch of geological science. Americans hold a pre-eminence in this field of investigation by virtue of the exceeding richness and variety of the deposits which are accessible to them. The intelligent appreciation of this fact by the distin-

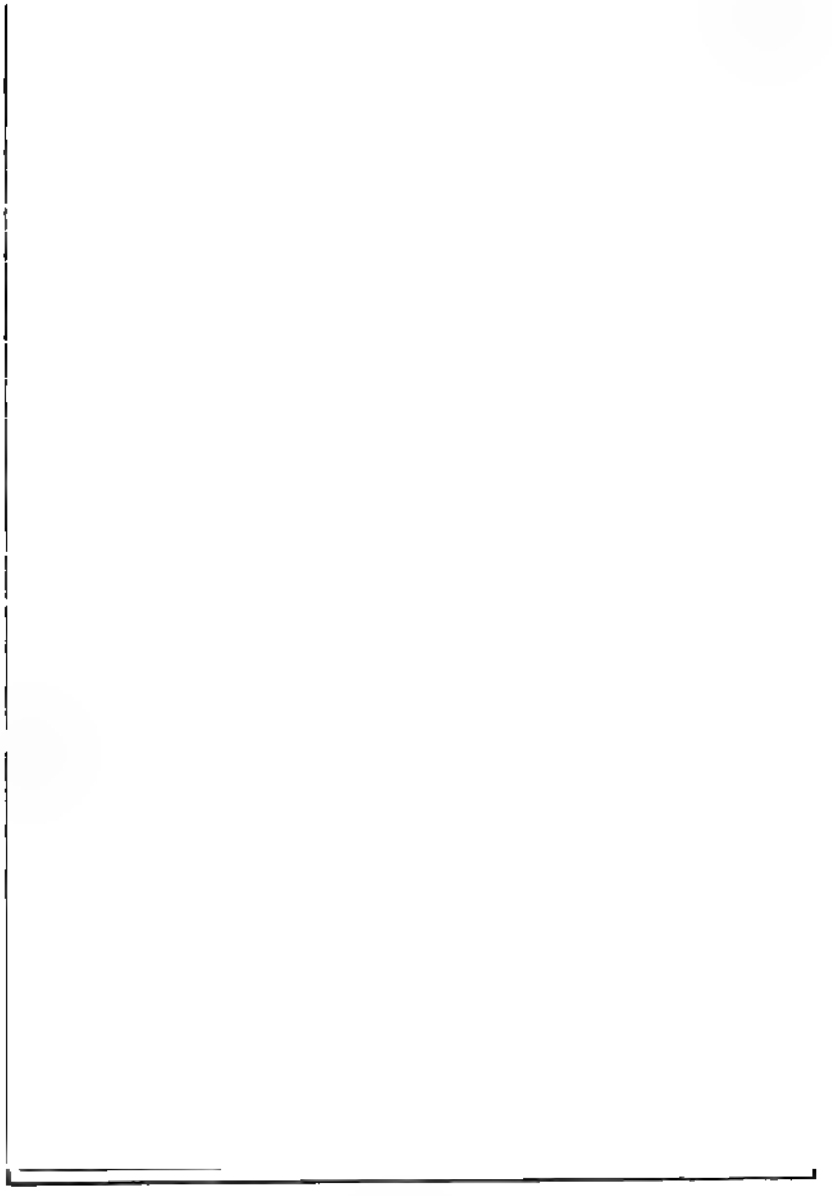
guished founder of the Institute, and his generous willingness to aid in the conduct of further researches, encourage us in cherishing the hope that we may be able to assemble in our Museum a collection which will serve not only to interest and supply popular instruction, but also to enlarge the boundaries of science. The field that is open to research in the direction indicated has been by no means exhausted; it may be said to have scarcely been touched, and recent discoveries encourage us to think that very great and even marvelous truths are waiting to be uncovered. The Director is not in a position at the present time to fully communicate to the Board the results of his investigations undertaken at the request of Mr. Carnegie, but believes that with the co-operation of the Trustees the kind offers of Mr. Carnegie will ultimately result in researches and discoveries of which we shall all have occasion to be proud.

COMPARATIVE ANATOMY.

A number of very important additions have been made to our already extensive collection of osteological specimens and anatomical models. These additions consist principally of skeletons which have been mounted in the department of preparation under the skillful hands of Mr. W. H. Brown, who for a long time was associated with Mr. Lucas in the Department of Osteology at the National Museum in Washington. The importance of these collections as bearing upon the life of the past as well as the life of the present, cannot be overestimated, and their educational value has been abundantly demonstrated during the past year. Not a week has passed during which classes of pupils from the schools and colleges of Western Pennsylvania have not been under the guidance of teachers and professors, for the purpose of thoroughly studying these highly important and interesting assemblages of specimens.

BOTANY.

Beginning with the early spring and continuing the work until late in the fall, Mr. J. A. Shafer, the curator of the botanical collections, placed weekly on exhibition at the Museum a collection of the wild flowers and grasses of the county as they successively came into bloom, labeling the specimens and preserving them in a fresh state in pots and vases. In this manner persons



SIOUX COUNCILLOR.
Modeled by Theo. A. Mills.

were enabled to ascertain the names and the classification of the plants of the region as the seasons advanced. A number of teachers and pupils in the schools availed themselves of the information thus furnished and resorted regularly, week after week, to the Museum with their note-books. The idea, which was wholly original with Mr. Shafer, is one which certainly deserves approval. The work of the Museum, supplementing as it does the work of the Botanical Society of Western Pennsylvania and the splendid work accomplished in the conservatories established through the generosity of Mr. Henry Phipps, cannot fail to widely diffuse throughout the community a more scientific knowledge of the plant world. It is pleasing to observe how general the interest in floriculture and botany has become among our citizens. The monthly meetings of the Botanical Society, held in the lecture-hall of the Museum, are largely attended, at times several hundreds of persons being present to listen to the reading of papers and to attend to the display of specimens. Great credit in this connection must be given to Mr. William Falconer, the Superintendent of the Parks, for the faithful and generous interest which he has manifested. The refining and humanizing influence of these gentler pursuits, which are being cultivated by the various agencies alluded to, cannot fail to leave a marked impression upon the life of our busy city.

MINERALOGY AND GEOLOGY.

While a number of mineralogical and geological specimens have been added to those already contained in our Museum during the past year, nothing of particular note has been done along the lines of these sciences. The collections in our possession have, however, been all thoroughly labeled and, to some extent, rearranged; thus paving the way for future more active work. In this department of effort Mr. Douglas Stewart has rendered considerable assistance.

ETHNOLOGY.

A great deal of time and attention has been given to this department. Mr. Theodore A. Mills has been steadily continuing the good work, in reference to the beginnings of which I reported a year ago. Seven important groups representing the aboriginal races of this country have been installed, and six or seven other

groups of equal importance are at present in process of construction. We are under obligations both to the United States National Museum and to the American Museum of Natural History for assistance given us in securing material necessary in the work of preparing these groups. From Hon. C. L. Magee and Mr. and Mrs. W. A. Magee we have received highly important and interesting collections of Alaskan material. We united with the American Museum of Natural History, the Peabody Museum of Cambridge, and the Brooklyn Institute in purchasing a large and important collection of Alaskan implements. Our share of this collection has been received and properly installed. Through the kindness of Mr. Andrew Carnegie the great collection made by Mr. and Mrs. Hanna, which has for a number of years been deposited in the Museum, has become our permanent property, Mr. Carnegie having purchased the same. A multitude of donations of an interesting character have been made by various individuals and this department has become one of the most interesting as well as instructive in the Museum.

ANCIENT AND MEDIÆVAL ART.

We have obtained by purchase a small collection of interesting objects excavated in the vicinity of Latakia, in Asia Minor, representing Phœnician and Greek art. The objects are mainly small sculptures, and were obtained through Rev. Mr. and Mrs. J. S. Stewart. From Mr. Herbert H. Smith we have received as a loan a considerable collection of ancient pottery-ware discovered by him among the ruins of an ancient city in the United States of Colombia. We have also received as a gift from Mr. Utilles Baird an exceedingly handsome screen of ancient Japanese embroidery, and on deposit as a loan, from Mrs. W. E. Woodwell, some magnificent specimens of old Japanese ivory carvings.

MODERN ARTS AND MANUFACTURES.

In this department likewise we have made some additions to those previously reported. An especially beautiful exhibit has been donated to the Museum by the Carborundum Company, illustrating the process of manufacture as well as the products.

NUMISMATICS.

The Museum is under very great obligations to Magnus Pflaum, Esq., for his gift of his entire collection of coins number-

ing some seven hundred pieces, mainly illustrating the coinage of continental Europe, and containing numerous rare and valuable specimens. With this collection have been incorporated other collections of coins which have from time to time been received, and the whole has been placed on exhibition. A very valuable portion of this collection consists of a number of old English coins which were kindly donated by Mr. Joseph Patterson of Allegheny. Unfortunately some of these latter specimens attracted the attention of a miscreant who succeeded in breaking open the case and making away with the gold coins. I am happy, however, to report that the more valuable of these coins were ultimately recovered and the offender arrested and after trial sent to prison for two years. The three pieces which we failed to recover can easily be replaced by purchase. Proper precautions have been taken to render the repetition of such an offense more difficult, if not altogether impossible without immediate detection.

HISTORICAL COLLECTIONS.

A considerable number of historical relics relating to the early colonial period and the war of the revolution have been donated during the past year. Many relics of the civil war and a large number of interesting relics of the late war with Spain have come into our possession either as gifts or as loans. Among the latter special mention should be made of the very extensive collection deposited with the Museum by Capt. J. C. Read, which has attracted a great deal of attention and forms a center of interest to multitudes of visitors.

THE MUSEUM LIBRARY.

The entire collection of books belonging to the Museum has been carefully catalogued and arranged by Mr. Stewart, assisted by Messrs. Shafer and Williamson. I have to repeat what I have said in my last report, that this collection, while constituting a valuable nucleus, is still very defective, and we stand in very great need of a number of works for purposes of reference without which we are greatly hampered and retarded in the prosecution of our labors. To some extent our difficulties have been overcome by the kindness of friends who have loaned to the Museum works which we required for purposes of reference. It appears to me, however, that it would be a sound policy for the Museum to set

aside annually from its funds a small appropriation for the purchase of books. In this way we should in time gather a reference library such as a museum should by all means possess. The collections in the Carnegie Library are indeed accessible to us, but works upon natural history, ethnology, numismatics, ancient art, and allied subjects are not as yet strongly represented in that otherwise admirable collection.

THE PRIZE ESSAY CONTEST.

The third annual prize essay contest was held in November and December last and an award of prizes was made on the evening of December the 21st. The interest manifested in this contest was great, and we realize that much good has been accomplished by means of this pleasant undertaking in awakening a genuine interest in the Museum by the young people in the schools of the city.

THE ANDREW CARNEGIE NATURALIST CLUB.

This organization of young people has labored with notable success during the past fall and winter, and I am happy to report that the membership of the Club has greatly increased. Meetings have been held fortnightly on Saturday afternoon at which papers have been read by the members and lectures and addresses have been given by the Museum staff, as well as by friends of the institution who have kindly consented to aid the young people in their efforts. Mr. Webster has, with the consent of the Director, organized a class in practical taxidermy and has given instruction to fifteen or twenty of the Club in the art of skinning and properly mounting birds and small mammals. The Club has resolved itself into sections to prosecute special studies during the coming summer months. Prof. B. C. Jilson of the Pittsburgh Central High School has kindly consented to take charge of the section in geology and he will accompany them on a number of geological excursions in the vicinity. A section for work in botany is under the special care of Mr. J. A. Shafer. A section for work in entomology is under the care of Mr. E. B. Williamson. A section in mineralogy is under the care of Mr. Douglas Stewart. The gentlemen who have lectured before the Club during the year have been the following: Prof. B. C. Jilson, Mr. George H. Clapp, Mr. F. S. Webster,Mr. W. H. Brown, Mr. T. A. Mills, Mr. E. B. Will-

iamson, Mr. J. A. Shafer, Mr. Douglas Stewart, and the Director. Prizes for work in the various departments during the coming summer and fall have been kindly offered as follows:

To the member of the Club who shall write the best essay, a prize of five dollars, offered by Mr. F. S. Webster.

To the member of the Club who shall make the best collection of herbarium specimens, a prize of five dollars, offered by Mr. C. C. Mellor.

To the member who shall make the best collection of the shells of Allegheny county, a prize of five dollars, offered by Mr. George H. Clapp.

To the member who shall make the best collection of minerals during the coming summer, a prize of ten dollars, offered by Mr. J. A. Brashear.

To the member who shall make the best collection of the insects of Allegheny county, a prize of twenty dollars, offered by the Director.

To the member who shall write the best essay upon our local history and antiquities, a prize consisting of a volume of the Life of Cromwell, offered by the author, Col. S. H. Church.

It is from the ranks of these bright and capable lads, numbering over one hundred, who compose the membership of this Club, that we must expect in the future to gather those who shall be in manhood the truest friends and helpers of the institution which we serve.

CO-OPERATION WITH SCHOOLS AND COLLEGES.

I have already incidentally alluded to the pleasing character of the work which has been accomplished during the past year in co-operating with the various schools and colleges of Western Pennsylvania, but it is proper to more particularly call the attention of the Board to the fact that the past year has more than any other year demonstrated the very great wisdom of the policy which we inaugurated in this regard. Not a week has passed which has not witnessed the coming to the Museum of a number of teachers accompanied by their pupils for the purpose of closely and accurately studying subjects that are illustrated by the collections which we possess. The Director has made it a point to place all possible facilities at the disposal of such visitors. The cases have been opened, the specimens under the care of the staff

have been placed at the disposal for the time being of the lecturer, and in many cases the members of the staff, including the Director, have themselves given time to the work of illustration and lecturing. The anatomical and osteological material has been especially in demand upon the part of the professors in the various professional schools and high schools, and there have been times when the work in the Museum has appeared more like that which is done in our colleges and universities than that which is ordinarily being done in museums where the sole end held in view is apparently the mere display of material. Our staff has at times seemed to resolve itself into a corps of teachers. It is needless to say that this work is believed to have been highly productive of good in a multitude of instances.

THE WORK FOR THE ENSUING YEAR.

Before concluding this report I should fail to do my whole duty were I to neglect to point out to you the fact that the means at our disposal would have been wholly inadequate to accomplish the work which has been done and to effect the results which have been achieved had it not been for the generous gifts which we have received during the past year from the kind donor of the institution. He has supplemented the appropriation made by your Board by gifts aggregating in value the sum of four thousand three hundred dollars, for which we owe him most grateful thanks. In carrying out the work which has been already planned and in part contracted for during the coming years it will be necessary for this department of the institution to receive if possible a somewhat larger appropriation than was made to us during the last year. The appropriation made by the Board was the same as was made the year before, but the Board failed to allow the Museum the benefit of the interest upon unexpended balances of that portion of the funds set apart for its use which was allowed in the previous year, and we were thus deprived of the amount of approximately six hundred dollars which we received the year before. You will pardon me if I suggest that in the division of funds it seems to me equitable that the Museum should receive the interest which accrues upon its balances, and that this interest money might well be applied in this department. There are two matters which call for immediate expenditure to a very considerable amount. We require a large sum of money for the purchase of

cases properly constructed in which to display objects which we possess and which are in process of preparation by the staff. Not less than five thousand dollars should be immediately spent in this way. We ought also to add to our force two or three men, thoroughly trained and expert, to render assistance in the department of preparation, in the department of conchology, and in the department of palæontology. The services of a good geologist and palæontologist and of a skilled conchologist are necessary in order that the work which we are doing may progress as it should. While the item for expenses on account of salaries may appear relatively large, it is proper to observe that the labors of those employed result in solid acquisitions of material, and that but little of this expenditure thus far has been for purely administrative purposes.

THIRD ANNUAL AWARD OF PRIZES.

The list of those who won prizes at the Annual Essay Contest is as follows:

HIGH SCHOOL.

Lucy Gannon,	3412 Millwood Street.
Ernest Hathaway,	5432 Walnut Street.
Richard Wilson Martin,	905 Wylie Avenue.
Elmer Henry Beckert,	137 Dithridge Street.
Max Henrici,	317 Shetland Avenue.
Edward Anthony Evans,	East Arlington Avenue, S. S.
Donald B. McKay,	515 Emerson Street.
Marie Oller,	6103 Alder Street.
Melzina H. Proudfit,	5876 Ellsworth Avenue.
Grace Rosella Dodds,	6229 Station Street.
Paul G. McClelland,	3510 Ridge Avenue.
Thomas H. Bard,	217 Craig Street.
Florence Dauler Johns,	Terrace Avenue, Oakland.

The following is a list of the prize winners in Step 14:

STEP FOURTEEN. WARD SCHOOLS.

Laura E. Stewart,	137 S. 20th Street.
Katherine Armstrong,	317 Elysian Avenue.
Karl Fletcher Liljegren,	5824 Rural Avenue.
Bertha Edna Martin,	West End.
George Gundelfinger,	136 S. Main Street.
Harry Neale,	1323 Sycamore Street.
Marion C. Knake,	249 Meyran Avenue.
Clyde English,	58 Augusta Street.
Gertrude Lipphart,	6855 Penn Avenue.
Ellen Reed,	405 East End Avenue.
Jean McGirr,	Homewood Avenue.
Flora Zoch,	6820 Thomas Street.
Martha McGowan,	East End Avenue.

FINANCIAL STATEMENT

OF THE

CARNEGIE MUSEUM, PITTSBURGH, PENNA.

April 1st, 1898—April 1st, 1899.

RECEIPTS.

1898.			
April 1.	To Balance on hand	$ 49 72	
" 20.	" Annual Appropriation	20,000 00	
" 13.	" Cash from Peabody Museum, account sale of Specimens	12 00	
1899.			
March 31.	To Cash, account sale of Material (Boxes)	4 72	
" 31.	" Cash, sundry amounts refunded at various times account freight, overcharges, etc	45 80	
			$20,112 24

DISBURSEMENTS.

1899.			
March 31.	By Salaries.....	$ 8,347 51	
	" Labor	24 10	
	" Traveling Expenses, Carfare, etc	34 75	
	" Books and Periodicals..	17 25	
	" Office Furniture (Hammond Typewriter) ..	85 50	
	" Office Supplies, Stationery, etc	78 23	
	" Postages, Telegrams, Revenue Stamps ..	63 70	
	" Packing and Unpacking	11 16	
	" Freight and Expressage	216 79	
	" Cases, Drawers, etc.....	3,944 58	
	" Glassware, Corks, etc...	7 73	
	" Alcohol, Chemicals,etc..	117 63	
	" Boxes, Trays, etc..	24 65	
	" Printing, Labels, etc...	511 10	
	" Photographs, Frames, etc	49 42	
	" Laboratory Fixtures ...	39 60	
	" Sundry Laboratory Expenses	101 88	
	" Expenses Taxidermic Laboratory	107 21	
	" Furniture other than Cases and Drawers..	14 65	
	" Tools	4 65	
	" Storage	100 00	
	" Prizes (Annual Essay Contest)	200 00	
	Purchase of Collections....	5,823 65	
	Petty Cash advanced to Director..	100 00	
	Petty Cash advanced by Director to J. A. Shafer.....	5 00	20,030 74
	Balance to credit of Museum Fund		81 50

THE MASTODON (*Mastodon Americanus Cuvier*).

This is the largest and, with possibly one exception, the most perfect specimen in any museum. The skeleton is ten feet high from the top of the base to the top of the spine of the third dorsal vertebra. The hyoid bones are all present

PERMANENT ACCESSIONS TO THE CARNEGIE MUSEUM,

From April 1, 1898, to April 1, 1899.

Donated unless otherwise indicated.

Aiken, Margaret, Pittsburgh, Pa. Crow blackbird (Quiscalus quiscula æneus Ridgw). April 2, 1898.....(501)

American Museum of Natural History, New York, N. Y. Ethnological collection from northwestern North America, consisting of 44 items. Exchange. August 2, 1898.....(638)
Ethnological collection from Port Clarence, Alaska, made by Minor Bruce, 460 objects. Purchased. December 22, 1898.....(816)
Group representing camel and camel driver attacked by lions, made by Jules Verreaux. Exchange. January 31, 1899.....(848)

Atkinson, D. A., Wilkinsburg, Pittsburgh, Pa. Birdskins, principally from Allegheny Co., Pa., 87 species, 126 skins, November 5, 1898. (754)
Amphibians, 13 specimens, 5 species, from Allegheny Co., Pa. November 21, 1898.....(775)
Prairie horned lark (Otocoris alpestris praticola Henshaw)..March 2, 1899.....(861)

Badders, B. F., Allegheny, Pa. Two insects (Belostoma grandis). May 21, 1898.....(546)

Bailey, F. S., Pittsburgh, Pa. Fossil (Lepidodendron), near Markleton, Somerset Co., Pa. June 18, 1898.....(586)

Baird, Utilles, Allegheny, Pa. Japanese tapestry, from Kyoto, about 150 years old. December 12, 1898.....(801)

Beach, G. M., Pittsburgh, Pa. Fossil ferns (Neuropteris Loschii), banks of Youghiogheny, opposite McKeesport. November 18, 1898..(774)

Bennett, Dr. F. G., Mahaffey, Pa. Fossil shells, two specimens, taken from railroad cut near Punxsutawney, Pa. September 27, 1898. (709)
Fifty plants, from Lebanon, O., collected by the donor in 1884; 27 plants from Edinboro, Pa., collected by Mrs. Dr. F. G. Bennett in 1884. September 29, 1898.....(717)
Hellbender (Cryptobranchus alleghaniensis Daudin), Mahaffey, Pa. October 4, 1898.....(728)

Boggs, Anderson C., Shousetown, Pa. Stone nodule, sandstone quarry on Flaugherty Run, Allegheny Co., Pa. July 26, 1898.....(628)
Snake (Coluber obsoletus alleghaniensis Holbrook), Moon Twp., Allegheny Co., Pa. August 12, 1898.....(646)
Box tortoise (Terrapene carolina L.), Moon Twp., Allegheny Co., Pa. August 22, 1898 .....(666)

Booth Bros & Hurricane Isle Granite Co., New London, Conn. White granite, in cube, with rough, cut, and polished surfaces. June 9, 1898 .....(579)

Bowers, Henry C., Pittsburgh, Pa. Weasel (Putorius noveboracensis De Kay). January 30, 1899 .....(843)
Screech owl (Megascops asio L.) January 30, 1899.....(844)

Brimley, H. H. & C. S., Raleigh, N. C. Two young muskrats (Fiber zibethicus L.) skins. Purchased. May 25, 1898.....(551)

Brockett, H. B., Pittsburgh, Pa. Shale concretion, banks of Conemaugh River opposite Tunnelton, Indiana Co., Pa. August 23.....(670)

Brown, Wm. Harvey, Salisbury, Rhodesia, S. A. Lioness skin, and buffalo heads (5 skins and 2 skulls). Donated. June 16, 1898.....(581)
Collection of large mammals from South Africa ,11 specimens, skins, skulls and skeletons. Purchased. June 16, 1898.....(582)

Buffington, Hon. Joseph and Orr, Kittanning, Pa. Birch-bark canoe and two paddles. June 20, 1898.....(587)

Burgwin, Hill, Hazelwood, Pittsburgh, Pa. Bone fragments, three mealing stones, and three flints taken from mound on Mr. Burgwin's place at Hazelwood. July 14, 1898 .....(617)

Burns, W. C., Pittsburgh, Pa. Two photographs of archæological specimens of the W. C. Burns collection. November 30, 1898....(790)

Burtner, G. A., Freeport, Pa. Photographs showing cairn of Burgwin's mound (three prints from negative furnished). July 26, 1898..(629)
Snake (Diadophis punctatus L.), Schenley Park, Pittsburgh, Pa. October 1, 1898 .....(725)

Cadwallader, Louis, Pittsburgh, Pa. Homing pigeon. March 10, 1899. (871)

Campbell, Frank, Pittsburgh, Pa. Several small embryos of rat (Mus decumanus Pallas). November 21, 1898.....(776)

Carborundum Company, Niagara Falls, N. Y. Specimens illustrating the manufacture of Carborundum. February 13, 1899.....(853)

Carnegie, Andrew. Skulls (dissected) of man, monkey, dog, cat, rabbit, horse, dolphin, sheep, ostrich, crocodile, boa, codfish. April 8, 1898. (505)
Models: manikin, human arm (dissected), human leg (dissected), intestinal villosity. April 8, 1898 .....(506)

Carnegie, Andrew—Continued.

Models: jelly-fish in gelatine; anatomy of tapeworm and silkworm; and development of star-fish, trout, frog and chick. April 8, 1898. (507)

Botanical models: poppy, poppy-bud, fuchsia, harebell, orchis, lily, arum, germination of bean (5 stages), germination of grain of wheat (5 stages), section of a leaf. April 8, 1898.....(508)

Gold-bearing quartz, Mucetown, Lake Co., New Zealand, 2 pieces; native gold in quartz, Ballarat, Victoria, 2 pieces. July 26, 1898. (630)

Iron pyrites—detached crystals, stalactite. Isle of Elba. July 26, 1898 .....(631)

Shells, 445 specimens, together with some very small ones, single valves and opercula; about 45 species. July 26, 1898.....(632)

Corals and echinoderms, several varieties, 5 specimens. July 26, 1898. (633)

Fossil shell. July 26, 1898 .....(634)

Sea-horse (2 specimens). July 26, 1898 .....(635)

Mastodon (M. americanus Cuvier). Found, October, 1897, five miles west of Waterloo, Indiana. November 3, 1898 .....(745)

Piece of the first experimental line of electric telegraph, with explanatory letter, and three illustrations of the first telegraph instrument used. November 11, 1898 .....(765)

Precious stones and minerals of the W. P. Hanna collection. December 23, 1898.....(818)

Ethnological material of the W. P. Hanna collection. December 23, 1898 .....(819)

Photographs from the W. P. Hanna collection. December 23, 1898. (820)

Botanical material of the W. P. Hanna collection. December 23, 1898 .....(821)

Numismatical material of the W. P. Hanna collection. December 23, 1898 .....(822)

Miscellaneous articles of the W. P. Hanna collection. December 23, 1898 .....(823)

CARNEGIE MUSEUM STAFF.

Link, G. A., and E. B. Williamson. Retriever dog, skeleton saved. Collected. November 30, 1898..... 791)

Mills, Theo. A. Indian figures modeled in the Museum laboratories: Sioux warrior, exhibiting—headdress, 484-11; bracelet, used by Matonajni (Standing Bear), a Cut-head medicine-man, 484-19; necklace, 715-2; moccasins, once owned and worn by the late chief Sitting Bull, 484-13; knife, 484-35; buffalo skull, 252-27c; breechcloth and scalp. November 3, 1898 .....(746)

Sioux chief, exhibiting—war-bonnet, made and used by Nici-mbduya, a sub-chief of the Cut-heads, 484-2; necklace, 715-3; ear-pendants, 715-5a; pipe, 484-36; buffalo robe, 527; moccasins, 559. November 3, 1898 .....(747)

Carnegie Museum Staff—Continued.

Group of squaw, boy and pappoose. On squaw: suit, L. 94-1; leggings, L. 94-2; belt and knife-sheath, 484-9; ear-pendants, 715-6a; moccasins, 553. On boy: suit owned and used by a son of Wahpiasunka (Cloud Dog), a Cut-head warrior, 484-26; moccasins, 484-24; fire-bag, 484-37; arrow; arrow-point, 16-500; bow. On pappoose: "hood," owned and used by Candupawin, 484-33; doll made by a Sioux squaw, 484-34. November 3, 1898 .....(748)

Moki basket maker, exhibiting—dress, 715-8a; ear-pendants (fac simile), 715-7a; coil baskets, 715-21, 22, 23; basket splints, 715-17. November 3, 1898 .....(749)

Navajo weaver, exhibiting—loom and unfinished blanket, 637; blanket, 715-9; silver necklace, 715-1; silver earrings, 715-4a; pottery, 672. November 3, 1898 .....(750)

Group of two Zuni pottery makers, exhibiting—pottery, 7 pieces, 715-10-16 inc.; rubbing stones, 76- ; pottery fragments, 76-300d. November 3, 1898 ....(751)

Group of two Ojibwa basket makers, exhibiting—baskets in various stages and block for cutting splints, No. 97-3e. November 3, 1898. (752)

Rhoads, S. N. Zoological material collected near Beaver, Pa., in April and May, 1898:

Bird skins, 76 species, 207 specimens, (561); birds' nests and eggs, 30 species, 33 specimens, (562); mammals, skins and embryos, 10 species, 48 specimens, (563); reptiles, 3 species, 6 specimens, (564); crustaceans, 2 species, 72 specimens, (565); mollusks, 547 specimens, (566); fishes, 91 specimens, (567); amphibians, 10 species, 162 specimens, (568).

Zoological material collected in Westmoreland Co., Pa., June and July, 1898:

Nine birds nests with eggs and surrounding branches, (583); 11 birds' nests with eggs, (598); 8 nests with eggs of the cliff swallow (Petrochelidon lunifrons, Say), (606); 7 birds' nests with eggs, branches surrounding, (607); birdskins, 23 species, 49 specimens, (608); mammals, 10 species, 22 skins, 2 alcoholics and 3 skeletons, (609); reptiles, 6 species, 10 specimens, also eggs of snapping turtle, (610); crustaceans, 2 species, 14 specimens, (611); mollusks, 257 specimens, (612); fishes, 27 specimens, (613); amphibians, 71 specimens, (614).

Zoological material collected in Cambria Co., Pa., July and August, 1898:

Mammals, 10 species, 65 skins, 17 alcoholics, 8 skeletons, and 5 additional skulls, (653); bird skins, 20 specimens, (654); bird nests with eggs, 3 specimens, (655); reptiles, 7 specimens, (656); amphibians, 194 specimens, (657); fishes, 47 specimens, (658); crustaceans, 131 specimens, (659); mollusks, 390 specimens, (660); beetles, (Cychrus), 5 specimens, (679).

Rhoads, S. N., and E. B. Williamson. Crayfish (Cambarus propin-

quus Gir.), 5 specimens; frog (Rana virescens Kalm.), Six-mile Island, Allegheny River. August 13, 1898.....(648)

Crayfish (Cambarus dubius Fax.), 25 specimens, 1 ad. female and 24 juv., Fern Hollow, Pittsburgh. September 23, 1898.....(702)

Shafer, John A. Wild flower exhibit—consisting or fresh specimens of native plants constantly exhibited by renewal from frequent collections. About 300 species, accurately identified and comprehensively labeled, were represented from May to October, 1898.

Herbarium specimens, 500 Allegheny Co. plants, collected in 1898. (880)

Seeds of 25 species of Allegheny Co. plants, collected in 1898..(883)

Webster, F. S. Models of reptiles, made in the Museum laboratories:

Rattlesnake (Crotalus horridus L.), over which the skin of No. 295-4 is drawn.

Blacksnake (Bascanion constrictor L.), cast from No. 295-3. November 3, 1898 .....(753)

Williamson, E. B. Snake (Diadophis punctatus L.); salamanders (Spelerpes longicaudus Green, and Desmognathus fuscus Raf.), 2 specimens; frog (Rana clamata Daudin). Haight's Run, Allegheny Co., Pa. August 23, 1898.....(669)

Carter, W. W., Pittsburgh, Pa. Fossil fern, taken from Gray & Bell tunnel, under Mt. Washington, Pittsburgh, Pa., (1872). Fossil shell encrusted with iron pyrites, Alton, Ill. June 24, 1898.....(588)

Chance, W. H., Canton, O. Duck-billed platypus (Ornithorhynchus anatinus). Purchased. January 16, 1899 .....(833)

Clapp, George H., Pittsburgh, Pa. Crayfish: (Cambarus virilis Hag.), six specimens from Sandy Lake, Ontario, Canada; (Cambarus bartonii Fabr.), 1 specimen, from Edgeworth, Allegheny Co., Pa.

Barnacles, 7 specimens, San Diego, Cal. April 26, 1898.....(519)

Land shells, 14 species, represented by 49 specimens. October 20, 1898..... ....(739)

Fossils (shell and coral), Stoop's Ferry, Pa. October 22, 1898. (740)

Clarke, Louis S., Pittsburgh, Pa., one-pound shell from rapid-fire gun, taken from wreck of battleship Maine, Havana Harbor. Wooden Spoon made by Seminoles of Southern Florida. Small Aztec idol from Mexico, made of onyx. July 13, 1898 .....(616)

Clarke, Chas. J., Pittsburgh, Pa. Samia cecropia L. 11 cocoons. December 16, 1898 .....(807)

Coleridge, John, Pittsburgh, Pa. Large sunfish (Mola mola L.), (mounted). Purchased. May 10, 1898 .....(538)

Colleran, Annie, Pittsburgh, Pa. Grasshopper (Acridium americanum Drury), Allegheny Co., Pa. November 23, 1898 .....(781)

Conrad, G. B., Pittsburgh, Pa. Embryos of rat (Mus decumanus Pallas), 9 specimens. November 7, 1898 .....(756)

Cornelius, H. R., Pittsburgh, Pa. Iron concretion (Limonite). September 8, 1898 .....(690)

Cunningham, Chas. R., Pittsburgh, Pa. Horned toad (Phrynosoma cornutum Harlan), June 30, 1898 .....(593)

Dally, Chas. A., Carnot, Pa. Club-moss (Lycopodium complinatum L.), Allegheny Co., Pa. April 18, 1898 .....(513)

Darsie, George, Pittsburgh, Pa. Water-snake (Tropidonotus sipedon L.), May 28, 1898 .....(557)

De la Meillaie, Mr., Allegheny, Pa. Abnormal hen's egg from Upper Canada. September 28, 1898 .....(713)

Dole, William, Pittsburgh, Pa. Seeds of 9 species of plants, mostly palms. August 30, 1898 .....(682)
Tree-frog (Hyla sp.), young, from Schenley Park. September 1, 1898 .....(685)
Snake (Coluber quadrivittatus Holbrook), taken from top of tall palm in Phipps Conservatory. November 7, 1898.....(755)

Doyle, Dr. J. A., Homestead, Pa. Otter (Lutra hudsonica Lacepede), Homestead, Pa. Purchased. March 28, 1899.....(895)

Ebner, Mrs. Frank, Pittsburgh, Pa. Eight Centennial views. Wood from a union ram used in war of the rebellion. November 9, 1898.....(759)
Copper pyrites in calcite (8 specimens), French Creek Falls, Chester Co., Pa. November 9, 1898 .....(760)

Ebert, W. T., Pittsburgh, Pa. Double-fronted parrot (Psittacus levaillanti Russ.). January 30, 1899.....(842)
Double-fronted parrot (Psittacus levaillanti Russ.). February 8, 1899 .....(851)

Emmal, Terrence, Pittsburgh, Pa. Small mammoth tooth, Bigbone, Kentucky. Purchased. March 2, 1899.....(862)

Farmer, Rev. Wm. R., Edgewood Park, Pa. Snake (Ophibolus doliatus L.), caught near Edgewood, Allegheny Co., Pa. July 16, 1898. (621)

Ferguson, E. M., Pittsburgh, Pa. Bald eagle (Haliæetus leucocephalus L.), mounted. Captured on Fisher's Island, N. Y. April 16, 1898. (511)

Ferguson, John, Highwood Cemetery, Allegheny, Pa. Seeds of Japanese weeping cherry, oriental poppy, and celandine poppy. July 8, 1898. (602)

Ferguson, John—Continued.

Seeds of 20 species of plants. August 5, 1898.....(640)
Herbarium specimens of 9 species of plants. August 15, 1898..(652)
Seeds of 12 species of plants. November 10, 1898.....(764)
Seeds of Abrus precatorius, sent by a soldier from Porto Rico. November 14, 1898 .....(768)

Flood, Clement, Pittsburgh, Pa. Chip of wood from "Surrender Tree," Santiago de Cuba. February 20, 1899 .....(854)

Foerster, Robert, Pittsburgh, Pa. Insects, miscellaneous, 53 specimens, Allegheny Co., Pa. June 18, 1898 .....(584)

Ford, Hon. H. P., Pittsburgh, Pa. Bracelet, turquoise ring, purse with two Russian coins, etc., January 7, 1899.....(827)
Key of first jail of Allegheny county, Pa., presented to the Museum by order of a Resolution of the City Councils. March 31, 1899...(898)

Fowler, M. N., Foxburg, Pa. Moth (Callimorpha lecontii). July 16, 1898. (623)
Moth. September 7, 1898 .....(689)

France, H. A., Pittsburgh, Pa. Horned toad (Phrynosoma cornutum Harlan). July 26, 1898 .....(627)

Frew, W. N., Pittsburgh, Pa. Autograph of C. N. Bliss. December 23, 1898 .....(817)

Friend, Frank J., Pittsburgh, Pa. Glacial pebbles, 8 specimens, from Lake Teslin, Yukon District, N. W. Territory. December 16, 1898...(810)

Friend, Kennedy T., Pittsburgh, Pa. Piece of marble from the Parthenon, Athens, obtained by Mr. Friend personally at the excavations in 1889. April 8, 1898.....(503)

Frossard, Ed., New York, N. Y. Portrait of George Washington at age nineteen. March 24, 1899 .....(886)

Frost, Ellis, Pittsburgh, Pa. Myriapods (7 specimens), spiders (2 specimens), and neuropterous nymph. January 31, 1899.....(845)
Crayfish (Cambarus bartonii Fabr.), 2 specimens. January 31, 1899. (846)
Batrachians, 26 specimens, in alcohol. January 31, 1898.....(847)

Fulmer, Chas. E., Philadelphia, Pa. Krag-Jorgensen cartridge, carried by a member of the First Engineers Corps of the United States Army during their campaign in Porto Rico. December 6, 1898.....(794)

Glaser, L. A., Sewickley, Pa. Bird skins, 6 specimens. February 23, 1899. (856)

Goodman, William, Pittsburgh, Pa. Star-fish, 4 shells, 2 pieces of flint. August 10, 1898 .....(643)

Graf, J. L., Pittsburgh, Pa. Snakes (Thamnophis sirtalis L., and Natrix leberis L.), Squaw Run, Allegheny Co., Pa. September 24, 1898. (705)

Frog (Rana virescens Kalm), very large specimen, Squaw Run, Allegheny Co., Pa. September 27, 1898.....(708)

Cambarus bartonii (Fabr.)—2 large pincers. November 12, 1898. (766)

Hamilton, William, Supt. Allegheny Parks, Allegheny, Pa. Pond turtle (Chrysemys marginata Agassiz). November 22, 1898.....(777)

Hetzel, John A., Allegheny, Pa. Stone celt, found at Spring Hill. Reserve Twp., Allegheny Co., near Seventh ward school-house, in 1893. September 9, 1898 .....(691)

Hine, J. S., Columbus, Ohio. Horse-flies (Tabanus punctifer, 2 specimens; Chrysopus vittatus, 3 specimens). Exchange. December 12, 1898. (799)

Hoffstetter, J. C., Erie, Pa. "Old time" railroad tickets, 3 specimens. April 6, 1898 .....(502)

Holland, Dr. W. J., Pittsburgh, Pa. "Twinned" cherries, from California. June 3, 1898 .....(574)

Garpike (Lepisosteus osseus L.), mounted. June 30, 1898..(595)

Batrachian (Rana), from Mashonaland, Africa, collected by Wm. Harvey Brown. July 11, 1898 .....(603)

Birds from Mashonaland, Africa, 2 specimens, collected by Wm. Harvey Brown. July 11, 1898 .....(604)

Small mammals—19 skins, 16 skulls, and 1 head, from Mashonaland, Africa. Collected by Wm. Harvey Brown. July 11, 1898....(605)

Coleoptera, 22 specimens; Crustaceæ, 55 specimens; 2 shark's eggs. August 23, 1898 .....(667)

Group of two great blue herons (Ardea herodias L.), from Florida, mounted. October 20, 1898 .....(738)

"Gannister," from Lehigh Gap, Carbon Co., Pa. December 16, 1898. (805)

Small hornet's nest from Lehigh Gap, Carbon Co., Pa. December 16, 1898 .....(808)

Lot of bone beads from grave of an African chief, Lake Onanga, French Congo, Africa, collected by A. C. Good, Ph. D. March 2, 1899 .....(863)

Houston, Miss Margaret E., Cannonsburg, Pa. Specimens of plants (Erigenia bulbosa Nutt., and Erythronium americanum, Smith), from Washington Co., Pa. April 15, 1898 .....(509)

Basket of plants, from Washington Co., Pa. May 5, 1898....(532)

Specimens of Houstonia ciliolata Torr., from Washington Co., Pa. May 17, 1898 .....(542)

Specimens of Clintonia umbellulata (Mx.) Torr., from Washington Co., Pa. June 4, 1898 .....(575)

Specimens of Cuphea viscosissima Jacq., from Washington Co., Pa. September 27, 1898 .....(712)

Johns, Louis, Pittsburgh, Pa. Beetle (Triornis), found at the excavation of the Burgwin mound, Hazlewood, Pittsburgh, Pa., July 11, 1898. July 20, 1898 ..... (625)

Johnson, J. H., Pittsburgh, Pa. Two old flint-lock guns, used in Kentucky about 1810. Purchased. February 27, 1899..... (858)

Johnson, William, Petersburg, Ohio. Weasel (Putorius noveboracensis De Kay), from Ohio. Purchased. December 12, 1898..... (798)

Kaltenbach, John, Knoxville, Allegheny Co., Pa. Samples of coffee, 8 varieties. January 25, 1899 ..... (841)

Kennedy, George B., Pittsburgh, Pa. Calamite specimen, from George Lysle & Sons' coal mine, Camden Station, Allegheny Co., Pa. March 10, 1899 ..... (872)

Kerby, J. O., Wilmore, Cambria Co., Pa. Twenty photographs of South American Indians. May 7, 1898 ..... (533)

Kinzer, George M., Pittsburgh, Pa. Piece of shell from Fort Duquesne, found while excavating for a foundation, corner of Second St. and Penn Ave., about 1882. August 30, 1898 ..... (681)

Kirke, George W., Pittsburgh, Pa. Amnesty oath administered to Confederate soldier at close of the civil war. September 12, 1898.. (696)

Koch, Prof. J. A., Pittsburgh, Pa. Rock salt crystal, from mine 400 metres deep, Heilbronn, Wurtemburg, Germany. Peat, as sold in Munich, Germany, for fuel. October 1, 1898..... (727)

Koenig, Dr. Adolph, Pittsburgh, Pa. Rattles of rattlesnake from borders of the Columbia River, Washington. May 25, 1898..... (550)

La Flesche, Dr. Francis, Washington, D. C. Pair of moccasins. Purchased. May 31, 1898 ..... (559)

Link, G. A., Pittsburgh, Pa. Sharp-shinned hawk (Accipiter velox Wils.), Baldwin Twp., Allegheny Co., Pa., May 1, 1898..... (523)
Snake (Ophibolus doliatus L.), Mt. Washington, Pittsburgh, Pa. July 13, 1898 ..... (615)
Beetle, caught on Boggs Ave., Pittsburgh, Pa. July 13, 1898. (624)
Passenger pigeon (Ectopistes migratorius L.). August 15, 1898. (650)
Spotted sandpiper (Actitis macularia L.), May 16, 1898, Ross Twp., Allegheny Co., Pa. September 9, 1898..... (695)
Wood-duck (Aix sponsa L.), shot on the Ohio River. November 10, 1898 ..... (763)
Brazil nuts (Bertholletia excelsa) in the shell, 3 specimens. November 14, 1898 ..... (769)
Seed of the nutmeg tree (Myristica moschata), showing the arillode, which is the mace of commerce, covering a hard shell inside of which is the nucleus: this is the nutmeg of commerce. Six specimens. November 25, 1898 ..... (783)

Link, G. A.—Continued.
Beetles collected in Allegheny county, Pa. Euphoria fulgida, Phytonomus punctatus, Hister depurator. January 23, 1899.....(836)
Hairworm (Gordius aquaticus), found in abdominal cavity of a cricket. January 23, 1899.....(837)
Lamprey (Lampetra wilderi Gage), taken from the stomach of a great blue heron killed near Stoop's Ferry, Allegheny Co., Pa., April, 1898. January 23, 1899 .....(838)
Batrachians and reptiles, 15 specimens, representing 11 species. January 23, 1899 .....(839)

Lippincott, J. M., Pittsburgh, Pa. Ammunition carried by the Philadelphia troops on their retreat out Butler St. during railroad riots, July, 1877. July 16, 1898 .....(622)

Longest, Mrs. H., Bon Air, Chesterfield Co., Va. Tobacco seed, from near Richmond, Va. May 26, 1898.....(552)

Lucas, F. A., United States National Museum, Washington, D. C. Twelve photo. prints of the seal rookery of the Pribylov Islands. Purchased. August 31, 1898 .....(683)

Lucock, Frank, Comfort, Kennedy Co., Texas. Fossil shell (internal cast), from Texas. January 23, 1899 .....(834)
Myriapod, from Texas. January 23, 1899 .....(835)

Lucock, Frank, and J. N. Shepherd, Comfort, Kennedy Co., Texas. Fossils and calcareous formations, from Kennedy Co., Texas. 170 specimens. February 23, 1899 .....(857)

MacConnell, T. W., Pittsburgh, Pa. Butterfly (Meganostoma cæsonia Stoll), Schenley Park, early sping, 1898. November 26, 1898..(785)
Butterfly (Anosia plexippus L.), 3 specimens, Honolulu, on volcanic mountain, Kawaiohio. Collected by Miss A. Z. Hadley. December 12, 1898 .....(802)

Madden, J. W., Amanda, Ohio. Porcupine (Erethizon dorsatus L.), from northern Michigan. November 1, 1898 .....(744)

Maffett, J. T., Clarion, Pa. Campaign document of year 1880; caricature of a greenback. June 27, 1898.....(589)

Magee, C. L. and W. A., Pittsburgh, Pa. Eskimo hunting and fishing outfit, consisting of 15 objects: kayak, paddle, sled, seal net made of seal skin, fish net made of sinews, fresh-water carrier, food-carrier made of bladder, walrus harpoon, seal harpoon, seal spear, fish spear with stationary shaft; salmon spear with detachable point; shrimp net made of seal skin; halibut hook and float; harpoon line made of walrus skin. September 28, 1898 .....(714)

Magee, Mrs. W. A., Pittsburgh, Pa. Very large "cooking" basket from Cook's Inlet, Alaska. August 9, 1898.....(642)
Three knives, one made of native copper, and skin-scraper, from the Copper River Indians, Alaska; knife and sheath made from old scissors, from the Eskimos, Alaska. October 15, 1898....(734)
Eskimo surf coat and woman's boots. March 10, 1899.....(870)

A Glimpse into the Hall of Palæontology.

Mann, H. F., Pittsburgh, Pa. Nest of Baltimore oriole (Icterus galbula L.), on branch of wild cherry tree. November 8, 1898.....(758)

McCallam, Geo. W., Pittsburgh, Pa. Copy of Wheeling Advertiser of December 12, 1840, containing Presidential message of President Van Buren. May 18, 1898 .....(543)

McCallin, Miss Sophie, Pittsburgh, Pa. Check given by the Treasurer of Allegheny County to the Penna. R. R. in payment of riot damages, amount, $1,536,494.70. December 13, 1898.....(803)

McCallum, Misses Addie and Belle, Uneva-on-Cheat, W. Va. Skin of rattlesnake (Crotalus horridus L.). September 23, 1898.....(699)

McClelland, Rev. H. T., D. D., Pittsburgh, Pa. Dagger carved from catlinite, Pipestone Co., Minnesota. March 14, 1899.....(874)
Land patent given by Governor Wm. Gooch of Virginia to John Cox, dated 1747. March 14, 1898.....(875)

McConway, Mrs. Wm., Pittsburgh, Pa. Indian hammer stone, from Dakota. November 10, 1898 .....(761)
Minerals from Dakota, 5 specimens. November 10, 1898....(762)

Medsger, O. P., Ruffsdale, Westmoreland Co., Pa. Seed of the moth mullein (Verbascum blattaria L.). January 6, 1899.....(826)

Mellor, C. C., Pittsburgh, Pa. Seeds of calycanthus (Butneria florida L.), from Mr. Mellor's garden at Edgewood. June 2, 1898....(573)
Branch of calycanthus (Butneria florida L.), in flower. June 7, 1898..... ....(576)
Seeds of wild columbine (Aquilegia canadensis L.). June 30, 1898. (596)
Seeds of Yucca filamentosa L., Abutilon avicennæ Gaert., Althæ rosea L. September 27, 1898 .....(710)
Two cartoons (original drawings), "The laird's home coming," published in the Chronicle Telegraph, November 16, 1898; "At least one exception," published in the Press, November 16, 1898. December 28, 1898 ....(824)
Fruit of white fringe (Chionanthus virginica) and wild balsam-apple (Echinocystis lobata). February 27, 1899.....(859)

Mercer, Eccles B., Allegheny, Pa. 22 specimens of United States fractional currency. December 8, 1898 .....(795)

Messenger, W. E., Pittsburgh, Pa. Large spiders, 3 specimens, Mt. Washington, Pittsburgh, Pa. August 18, 1898.....(662)

Miller, Dr. J. M., Markleton, Pa. Specimens of Monotropa uniflora L., Hypopitys hypopitys L. Small, and Orontium aquaticum, from Markleton, Pa. September 1, 1898 .....(686)

Miller, Karl F., No. 48 Wall St., New York, N. Y. Silver and lead ore, Tucson, Arizona. February 4, 1898 .....(849)

Mills, Theodore A., Washington, D. C. English silver coin, 16th century, found by Mr. Mills while digging in his garden on C St., Washington, D. C. October 20, 1898 .....(736)

Morrow, Eustace S., Pittsburgh, Pa. Bond No. 12 of the City of Pittsburgh, issued November 24, 1832. September 1, 1898.....(684)

Murdoch, J. R., Pittsburgh, Pa. Green heron (Ardea virescens L), Schenley Park. May 3, 1898 .....(525)

Nash, B. T., Pittsburgh, Pa. Ores, 7 specimens, Colorado. May 18, 1898. (544)

Naturalists' Club, Andrew Carnegie, Pittsburgh, Pa. Material collected in Pittsburgh and vicinity.
Forty-eight myriapods. March 25, 1899 .....(887)
Five sow bugs (Oniscus). March 25, 1899 .....(888)
Six spiders. March 25, 1889.....(889)
Forty-three insects. March 25, 1899 .....(890)

Negley, Henry H., Pittsburgh, Pa. Pod with seed of lady's-slipper (Cypripedium reginæ Walt.). December 2, 1898 .....(792)
Seeds and pods of 29 varieties of plants. January 25, 1899....(840)

Obey, James, North Buffalo P. O., Armstrong Co., Pa. Pair of old millstones, said to have been used at Kittanning to grind corn during the French and Indian war. March 30, 1899 .....(896)

Ohio State University, Zoological Museum, Columbus, Ohio. Opossums (Didelphis virginiana Shaw), 6 young specimens, Knox county, Ohio. Exchange. November 7, 1898 .....(757)

Orth, George S., Pittsburgh, Pa. Navajo loom with blanket partly woven. Purchased. August 1, 1898 .....(637)
Salamander (Diemyctylus viridescens Raf.). August 23, 1898. (673)

Pflaum, Magnus, Pittsburgh, Pa. Collection of coins, many of historic interest, seven hundred specimens. July 16, 1898.....(620)

Pizzini, Louis W., Richmond, Va. Fruiting branches of Magnolia grandiflora L., from Richmond, Va. November 22, 1898.....(779)

Pringle, D. S., Pittsburgh, Pa. Photographs of mound on Mr. Hill Burgwin's place at Hazelwood, Pittsburgh, Pa., showing work of excavation. July 15, 1898 .....(619)

Rhoads, S. N., Haddonfield, N. J. Photographs of birds and bird nests, taken near Beaver, Pa., by Mr. Rhoads. May 31, 1898.....(569)
Rhododendron maximum L., from Westmoreland Co., Pa. July 1, 1898 ....(597)
Plants from Six-mile Island (Allegheny River). August 12, 1898. (647)
Skeleton of field-mouse (Microtus pennsylvanicus Ord.). Septem-

Rhoads, S. N.—Continued.
ber 6, 1898 .....(688)
Frogs (Rana virescens Kalm and Rana catesbiana Shaw), 2 specimens. Ohio River, near Coraopolis, Pa. September 27, 1898..(711)
Photographs of bird nests, 4. September 29, 1898.....(718)
Leech (Hirudo), from Ohio River, above Coraopolis, Pa. October 1, 1898 .....(726)
Unios, collected in "back" river, above Coraopolis, Pa., 69 specimens, representing 7 species. Purchased. October 8, 1898.....(730)
Black bear (Ursus americanus Pallas), skin and skeleton; porcupine (Erethizon dorsatus L.), skin; muskrat (Fiber zibethicus L.), skeleton. Round Island, Clinton Co., Pa. Purchased. November 15, 1898 .....(771)
Ruffed grouse (Bonasa umbellus L.), Round Island, Clinton Co., Pa., 2 specimens. Purchased. November 15, 1898.....(772)
Meadow mice (Microtus pennsylvanicus Ord.), 8 specimens, and short tailed shrew (Blarina brevicauda Say), Schenley Park, Pittsburgh, Pa. November 30, 1898 .....(789)
Otter (Lutra hudsonica Lacepede), skunk (Mephitis mephitica Shaw). Purchased. December 8, 1898 .....(796)

Ricketson, Oliver Garrison, Jr., Pittsburgh, Pa. Mounted butterfly (Papilio ulysses), from Queensland, Australia. October 28, 1898..(741)

Rinehart, Prof. E. E., Pittsburgh, Pa. Water bug (Belostoma grandis). July 7, 1898 .....(599)

Richey, Maj. A. P., Oil City, Pa. Ten Puerto Rican silver coins. March 2, 1899 .....(864)

Rooper, Edw., Santiago, Cal. Patula strigosa (shells), series of 137 specimens, showing the different types of striation in this species. Collected by Hemphill. Purchased. November 1, 1898 .....(743)

Rost, Hugo, Stoop's Ferry, Pa. Snake (Diadophis punctatus L.), Moon Twp., Allegheny Co., Pa. June 28, 1898 .....(591)
Garter snake (Thamnophis sirtalis L.), Moon Twp., Allegheny Co., Pa. July 25, 1898 .....(626)

Roth, Randall, Pittsburgh, Pa. "Porcupine" fish (Diodon), from Florida. November 1, 1898 .....(742)
Specimens of selenite, microclin, black tourmaline, Brazil. Exchanged. December 30, 1898 .....(825)

Rynearson, Prof. E., Pittsburgh, Pa. Tunicata (Molgula manhattanensis), 2 specimens; lancelet (Branchiostoma lanceolatum Pallas). November 29, 1898 .....(786)

Schanhoff, Mrs. J. D., Pittsburgh, Pa. Mouse (Mus musculus L.). November 30, 1898 .....(787)

Schanhoff, J. D., Pittsburgh, Pa. English sparrow (Passer domesticus L.). December 16, 1898 .....(809)

Schick, John W., Pittsburgh, Pa. Double-headed mouse (Mus musculus L.). July 14, 1898 .....(618)

Schilling, Paul C., Pittsburgh, Pa. Rattlesnake skin (Crotalus horridus L.), from Texas. May 3, 1898 .....(524)

Schleuderberg, C. G., Pittsburgh, Pa. Fossil (Calamite), from Oakridge coal mine, Oakdale station, Allegheny Co., Pa. March 23, 1899. (884)

Schooley, M. P., Homestead, Allegheny Co., Pa. Nest of mud-wasp. December 16, 1898 .....(808)

Seager, William, Leetsdale, Pa. Two young rabbits (Lepus sylvaticus Bachman), and weasel (Putorius noveboracensis De Kay), Allegheny Co., Pa. Purchased. April 22, 1898.....(517)
Loggerhead shrike (Lanius ludovicianus L.), red-tailed hawk (Buteo borealis Gmelin), American bittern (Botaurus lentiginosus Montagu), Allegheny Co., Pa. Purchased. April 22, 1898.....(518)
Three kingfishers (Ceryle alcyon L.), Carolina dove (Zenaidura macroura L.), two indigo buntings (Cyanospiza cyanea L.), Allegheny Co., Pa. Purchased. April 28, 1898 .....(520)
Weasel (Putorius noveboracensis De Key), Allegheny Co., Pa. Purchased. April 28, 1898 .....(521)
Virginia rail (Rallus virginianus L.), 7 Wilson's snipe (Gallinago delicata Ord.), American bittern (Botaurus lentiginosus Montagu), and Carolina rail (Porzana carolina L.), Allegheny Co., Pa. Purchased. May 2, 1898.....(522)
Wood pewee (Contopus virens L.), towhee (Pipilo erythrophthalmus L.), white-throated sparrow (Zonotrichia albicollis Gmelin), rose-breasted grosbeak (Zamelodia ludoviciana L.), scarlet tanager (Piranga erythromelas Vieillot), golden-winged warbler (Helminthophila chrysoptera L.), two yellow warblers (Dendroica æstiva Gmelin), cærulean warbler (Dendroica cærulea Wilson), blue-gray gnatcatcher (Polioptila cærulea L.), Allegheny Co., Pa. Purchased. May 3, 1898 .....(526)
Great blue heron (Ardea herodias L.), red-winged blackbird (Agelaius phœniceus L.), Baltimore oriole (Icterus galbula L.), goldfinch (Astragalinus tristis L.), three yellow warblers (Dendroica æstiva Gmelin), Allegheny Co., Pa. Purchased. May 5, 1898 ....(530)
Two skunks (Mephitis mephitica Shaw), from Allegheny Co., Pa. Purchased. May 5, 1898 ..... .(531)
Two Baltimore Orioles (Icterus galbula L.), towhee (Pipilo erythrophthalmus L.), goldfinch (Astragalinus tristis L.), two golden-winged warblers (Helminthophila chrysoptera L.), yellow warbler (Dendroica æstiva Gmelin), blue-gray gnatcatcher (Polioptila cærulea L.), Allegheny Co., Pa. Purchased. May 7, 1898..(534)
Ground-hog (Arctomys monax L.), and muskrat (Fiber zibethicus L.), Allegheny Co., Pa. Purchased. May 7, 1898.....(535)
Two young ground-hogs (Arctomys monax L.), and two young

Seager, William—Continued.
rabbits (Lepus sylvaticus Bachman), Allegheny Co., Pa. Purchased. May 10, 1898 .....(536)
Green heron (Ardea virescens L.), Allegheny Co., Pa. Purchased. May 10, 1898 .....(537)
Six young foxes (Vulpes fulvus Desmarest), and ground-hog (Arctomys monax L.), Allegheny Co., Pa. Purchased. May 16, 1898. (539)
Forty bird skins, collected in Allegheny Co., Pa. Purchased. May 16, 1898 .....(540)
Forty-one bird skins, collected in Allegheny Co., Pa. Purchased. May 24, 1898 .....(548)
Muskrats (Fiber zibethicus L.), two specimens. Purchased. May 24, 1898 .....(549)
Bird skins, 12 specimens, Allegheny Co., Pa. Purchased. August 23, 1898 .....(674)
Eight birds' nests, with 23 eggs, Allegheny Co., Pa. Purchased. August 23, 1898 .....(675)
Rabbit (Lepus sylvaticus Bachman), chipmunk (Tamias striatus L.), two skunks (Mephitis mephitica Shaw), four raccoons (Procyon lotor L.), Allegheny Co., Pa. Purchased.. August 23, 1898. (676)

Sennett, Hon. Geo. B., Youngstown, O. Collection of birds, consisting of 91 species, represented by 131 mounted birds. April 6, 1898....(504)
Twenty-four specimens of geodes. May 4, 1898 .....(529)
Birds of paradise, 13 species, represented by 21 specimens, also 3 allied species, in all 24 skins. Purchased. May 28, 1898....(555)
Collection of Texan birds, consisting of 49 species, represented by 85 mounted birds, 9 skins, 17 nests, and 21 sets of eggs. May 28, 1898 .....(556)

Shafer, Adolph T., Carnot, Pa. Young rabbits (Lepus sylvaticus Bachman), Moon Twp., Allegheny Co., Pa. Purchased. April 18, 1898. (512)
Crayfish (Cambarus dubius Fax.), Moon Twp., Allegheny, Co., Pa. June 7, 1898 .....(577)
Big brown bat (Adelonycteris fusca Beauvois), Moon Twp., Allegheny Co., Pa. September 30, 1898.....(719)

Shafer, Henry A., Carnot, Pa. Hairy-tailed mole (Parascalops breweri Bachman), Moon Twp., Allegheny Co., Pa. April 19, 1898..(514)

Shafer, John A., Pittsburgh, Pa. Robin (Merula migratoria L.). April 16, 1898 .....(510)
Young rabbit (Lepus sylvaticus Bachman), Moon Twp., Allegheny Co., Pa. May 4, 1898 .....(528)
Wasp nest with wasp, Moon Twp., Allegheny Co., Pa. May 21, 1898 .....(547)
Land shell (Mesodon diodonta Say), Moon Twp., Allegheny Co., Pa. Said to be the first living specimen reported from Allegheny

Shafer, John A.—Continued.
county. June 1, 1898 .....(572)
Garter-snake (Thamnophis sirtalis L.), Moon Twp., Allegheny Co., Pa. June 30, 1898 .....(594)
Little brown bat (Vesperugo carolinensis), Moon Twp., Allegheny Co., Pa. July 27, 1898 .....(636)
Little brown bat (Vesperugo carolinensis), Moon Twp., Allegheny Co., Pa. August 5, 1898 .....(639)
Very large toad (Bufo lentiginosus americanus Le Conte), Moon Twp., Allegheny Co., Pa. August 13, 1898 .....(649)
Young rabbit (Lepus sylvaticus Bachman), Moon Twp., Allegheny Co., Pa. August 19, 1898 .....(663)
Snake (Coluber obsoletus alleghaniensis Holbrook), Moon Twp., Allegheny Co., Pa. August 19, 1898.....(664)
Myriapods (3 specimens) and slug, from Moon Twp., Allegheny Co., Pa. September 20, 1898 .....(698)
Salamanders (2 Desmognathus fuscus Raf.), (2 Plethodon glutinosus Green), Moon Twp., Allegheny Co., Pa. October 8, 1898. (729)
Copperhead snake (Agkistrodon contortrix L.), near Hiland station, Pittsburgh, Pa. February 28, 1899 .....(860)
Hemipteron (Emesa longipes), Moon Twp., Allegheny Co., Pa. March 25, 1899 ....(891)

Shafer, Quercus T., Carnot, Pa. Box tortoise (Terrapene carolina L.), Moon Twp., Allegheny Co., Pa. May 28, 1898 .....(554)
Garter-snake (Thamnophis sirtalis L.), Moon Twp., Allegheny Co., Pa. August 16, 1898 .....(661)
Crayfish (3 Cambarus bartonii Fabr., 5 Cambarus propinquus Gir.), Flaugherty's Run, Allegheny Co., Pa. September 9, 1898.....(692)
Snakes (Tropidonotus sipedon L.), 2 specimens, Flaugherty's Run, Allegheny Co., Pa. September 9, 1898 .....(693)
"Twinned" butternuts (Juglans cinerea L.), Moon Twp., Allegheny Co., Pa. November 14, 1898 .....(770)
Spiders, 70 specimens, Moon Twp., Allegheny Co., Pa. March 18, 1899 ....(881)
Insects, 10 specimens, Moon Twp., Allegheny Co., Pa. March 18, 1899 ....(882)
Frog (Rana clamata Daudin) undergoing metamorphosis, Moon Twp., Allegheny Co., Pa. March 27, 1899 .....(893)
Dragonfly nymphs, 4 specimens—3 Aeschna constricta, Say, and 1 Libellulid. March 27, 1899 .....(894)

Shepherd, J. N., and Frank Lucock, Comfort Co., Texas. Fossils, Kennedy Co., Texas, 170 specimens. February 23, 1899 .....(857)

Sheppard, Trovello, Pittsburgh, Pa. White quartz, 3 specimens (2 being imperfect arrow-heads). December 16, 1898 .....(804)

Smith, H. H. Mammals, Colombia, S. A., probably 18 species, represented by 34 skins. Purchased. March 15, 1899 .....(876)

Smith, H. H.—Continued.

Mammal skeletons, Colombia, S. A.—paca, wild dog, howling monkey, wild hog (small), ant-eater, wild hog (large). Purchased. March 15, 1899 .....(877)

Bird skins, Colombia, S. A., 249 specimens, representing probably 153 species. Purchased. March 15, 1899 .....(878)

Soderstrom, Mr., British Consular Representative, Quito, Ecuador. Humming birds, 16 specimens, Ecuador. Exchanged. January 10, 1899. (828)

Sterrett, Dr. J. P., Pittsburgh, Pa. Mica schist, Chester Co., Pa. September 16, 1898 .....(697)

Limestone concretion, Juniata Co., Pa., found in Tuscarora Creek by the donor many years ago. October 18, 1898.....(735)

Miscellaneous lot of minerals and fossils. October 20, 1898...(737)

Stevenson, Alexander K., Pittsburgh, Pa. Splinter from the wood-work of the battleship Maine. June 8, 1898 .....(578)

Mauser bullet, taken from cartridge box of Spaniard killed at battle of El Caney, Cuba. October 13, 1898 .....(733)

Spanish-American war relics, secured by Corporal Harry Corcoran at Santiago de Cuba—cartridges and chip from "Surrender Tree." March 24, 1899 .....(855)

Stewart, Douglas, Allegheny, Pa. Two white pelicans (Pelecanus erythrorhynchos Gmelin), mounted, Conneaut Lake, Pa. November 22, 1898 .....(778)

"Coral" snake and tree-frog, South America. December 17, 1898. (811)

Tarantula, spider, and egg-case of spider, South America. December 17, 1898 .....(812)

Grasshopper and beetle, South America. December 17, 1898..(813)

Stewart, Mrs. J. S., Pittsburgh, Pa. Ethnological collection from Latakia, Syria. Purchased. January 10, 1899 .....(829)

Marine objects—sponges, coral, etc., Latakia, Syria. Purchased. January 10, 1899 .....(830)

Stag beetle and scarabid, Latakia, Syria. Purchased. January 10, 1899 .....(831)

Shells collected by Mrs. S. J. Stewart at Latakia, Syria, about 35 species, represented by 185 specimens; also many minute specimens in many species. Purchased. January 10, 1899 .....(832)

Stifel, Mrs. Louise, Pittsburgh, Pa. Letter written by Ernest Stifel, a soldier, during the civil war, June 25, 1862, at Arsenal P. O., Pittsburgh, Pa. February 13, 1899 .....(852)

Summers, J. F., Montgomery City, Mo. Buffalo robe. Purchased. May 3, 1898 .....(527)

Taylor, S. A., Pittsburgh, Pa. Ichneumon fly. September 9, 1898..(694)

Thomas, G. L., Pittsburgh, Pa. Fossil from Ohio. October 9, 1898. (732)

Timbey, H. H., Pittsburgh, Pa. Old style lantern. December 3, 1898. (793)

Todd, W. E. C., Washington, D. C. Birdskins from Western Pennsylvania, collected for W. E. C. Todd, 118 species, represented by 645 skins. Purchased. March 9, 1899 .....(865)
Birdskins, principally from Maryland, collected by Percy Shufeldt, 29 species, represented by 58 skins. Purchased. March 9, 1899. (866)
Birdskins, from West Virginia, collected by Thaddeus Surber, 32 species, represented by 42 skins. Purchased. March 9, 1899..(867)
Mammals, from Western Pennsylvania, collected for W. E. C. Todd, 23 species, represented by 124 skins. Purchased. March 9, 1899. (868)
Birds' nests and eggs, from western Pennsylvania, 4 species, represented by 4 nests, 1 with 4 eggs. Purchased. March 9, 1899..(869)

United States National Museum, Washington, D. C. Moki and Zuni objects, 28 in number—necklaces, ear-rings, blanket, pottery, baskets, etc. September 29, 1898 .....(715)

Ward, Miss Mary, Pittsburgh, Pa. Silicified wood, from Colorado. March 18, 1899 .....(879)

Watson, Harry C., Sewickley, Pa. Fossil fern. March 30, 1899.....(897)

Watt, A. J., McKees Rocks, Pa. Fossil (Sigillaria) found at McKees Rocks. July 7, 1898 .....(600)

Waugh, Mrs. Ella L., Greenville, Pa. Pair of Indian moccasins. Purchased. May 27, 1898 .....(553)

Webster, F. S., Pittsburgh, Pa. Two leg bones of elk (Cervus canadensis Erxleben). May 28, 1898 .....(558)
Little brown bat (Vesperugo carolinensis). May 31, 1898..(571)
Ferns, etc., from the Sandwich Islands, probably 12 species, represented by 25 specimens. June 28, 1898 .....(590)
Zuni pottery, 2 specimens. August 23, 1898.....(672)
Snake (Natrix leberis L.). September 1, 1898 .....(687)
Fern (Polypodium vulgare L.), from Salisbury, Pa. September 26, 1898 .....(706)
Geographic spider, found on Forbes St., Pittsburgh, Pa. September 27, 1898 .....(707)
Eggs of red-shouldered hawk (Buteo lineatus Gmelin), 2 sets. November 12, 1898 .....(767)
Blue Jay (Cyanocitta cristata L.), Allegheny Co., Pa. December 17, 1898 .....(814)
Land shell. March 14, 1899 .....(873)

Williamson, E. B. Pittsburgh, Pa. Salamanders (Desmognathus fuscus Raf.), 6 specimens, Schenley Park, Pittsburgh, Pa. August 23, 1898 ..... (668)
Crayfish (Cambarus dubius Fax., and Cambarus bartonii Fabr.), from Schenley Park, Pittsburgh, Pa. August 23, 1898 ..... (671)
Crayfish (Cambarus diogenes Gir.), 2 specimens from Silver Lake, Pittsburgh, Pa. August 30, 1898 ..... (677)
Crayfish (Cambarus propinquus Gir.), 3 specimens; (Cambarus bartonii Fabr.), 1 specimen; (Cambarus bartonii robustus Fax.), 1 specimen, from Squaw Run, Allegheny Co., Pa. August 30, 1898. (678)
Watersnakes (2 Natrix leberis L., 2 Tropidonotus sipedon L.), Squaw Run. Allegheny Co., Pa. August 30, 1898 ..... (680)
Dragonflies (Odonata), 47 species, represented by 90 specimens, mostly from northern Indiana. September 23, 1898 ..... (700)
Crayfish (Cambarus diogenes Gir.), collected at Columbus, Ohio. September 23, 1898 ..... (701)
Crayfish (Cambarus diogenes Gir.), Fern Hollow, Pittsburgh, Pa. September 23, 1898 ..... (703)
Crayfish (Cambarus bartonii Fabr.), Schenley Park, and (Cambarus bartonii robustus Fax.), Squaw Run, Allegheny Co., Pa., 2 specimens. September 24, 1898 ..... (704)
Field mice (Microtus pennsylvanicus Ord.), 5 embryos, Schenley Park, Pittsburgh, Pa. September 29, 1898 ..... (716)
Crayfish (Cambarus bartonii Fabr.), 2 large specimens, Schenley Park, Pittsburgh, Pa. October 8, 1898 ..... (731)
Crayfish (Cambarus dubius Fax.), from Fern Hollow, Pittsburgh, Pa. November 18, 1898 ..... (773)
Acrididæ, Allegheny Co., Pa., 135 specimens. November 23, 1898. (780)
Mus decumanus Pallas, 2 specimens. November 25, 1898..... (782)
Unio (Anadonta grandis var.), Wells Co., Indiana, 5 specimens. November 30, 1898 ..... (788)
Various insects collected in Allegheny county, August, September, and October, 1898. December 12, 1898 ..... (800)
Photographs of bird nests and eggs, 6, taken near Columbus, Ohio. February 21, 1899 ..... (855)
Seed of horse nettle (Solanum carolinensis L.), from O'Hara Twp., Allegheny Co., Pa. March 27, 1899 ..... (892)

Worth, Charles, Pittsburgh, Pa. Cannon-ball, found in the ground at McKees Rocks; 2 fragments of iron pyrites and galena. August 10, 1898 ..... (644)

Worthen, Chas. K., Warsaw, Ill. Carolina paroquets (Conurus carolinensis L.), 3 specimens; Massena partridges (Cyrtonyx montezumæ Vig.), 4 speicmens; cinnamon teal (Nettion cyanoptera Vieill.); avocet (Recurvirostra americana Gmelin). Purchased. May 31, 1898 ..... (560)
Cinnamon teal (Nettion cyanoptera L.)..... (570)

Worthen, Chas. K.—Continued.

Bald eagle (Haliæetus leucocephalus L), wild turkey (Meleagris gallopavo L.), and 4 Carolina paroquets (Conurus carolinesis L.), Purchased. August 15, 1898 .....(651)

Zoological Garden, Hiland Park, Pittsburgh, Pa. Prairie wolf (Canis latrans Say). April 19, 1898 .....(515)

Lady Amherst's pheasant. April 21, 1898 .....(516)

Lion, half-grown. May 17, 1898 .....(541)

Lion cub. May 21, 1898 .....(545)

Ostrich. June 13, 1898 .....(580)

Monkey and ape. June 28, 1898 .....(592)

Ape. July 7, 1898 .....(601)

Ostrich. August 6, 1898 .....(641)

Bengal tiger and dog-faced ape. August 12, 1898 .....(645)

Bengal tiger. August 19, 1898 .....(665)

American wildcat (Lynx rufus Guldenstadt). September 30, 1898. (720)

Golden eagle (Aquila chrysætos L.). September 30, 1898..(721)

Monkey. September 30, 1898 .....(722)

Monkey. September 30, 1898 .....(723)

Ostrich. September 30, 1898 .....(724)

Beaver (Castor fiber L.). November 25, 1898 .....(784)

Bengal tiger. December 22, 1898 .....(815)

Monkey. February 4, 1899 .....(850)

ACCESSIONS BY LOAN TO THE CARNEGIE MUSEUM.

From April 1, 1898, to April 1, 1899.

Batten, Dr. J. M., Pittsburgh, Pa. Two old muskets, one with bayonet, captured by Dr. J. M. Batten on the Confederate ram "Albemarle," October 28, 1864. March 18, 1899 .....(147)

Burns, W. C., Pittsburgh, Pa. Thirteen stone mortars with pestles, 5 stone mortars, 2 steatite bowls, large "cooking" pot, 2 small lava bowls, bone pipe; from the Pacific coast. Knife, from Sweden. July 16, 1898 .....(128)

Photographs of Moki Indians and their country, 27 framed pictures. August 13, 1898 .....(129)

Carnegie, Andrew, Naturalists' Club, Pittsburgh, Pa. Ornithological material donated to the Club by J. Warren Jacobs, consisting of 6 sets of birds' nests and eggs. 9 photographs of birds, etc., and 2 papers by J. Warren Jacobs. January 16, 1899.....(142)

Carnegie Library, Pittsburgh, Pa. Bust of J. D. Bernd. September 1, 1898.....(130)

Crawford, Robert Moore, Pittsburgh, Pa. Shed skin of rattlesnake and 2 stuffed fishes, from Barbadoes. June 27, 1898.....(127)

Daggett, Clair, Pittsburgh, Pa. Wasp, from Texas. November 9, 1898. (138)

Tarantula, centipede, etc., from Texas; 4 specimens in alcohol. January 16, 1899 .....(143)

Ebner, Mrs. Frank, Pittsburgh, Pa. Collection of 14 coins, viz: 8 American, 2 British, 1 South American, 1 German, 2 Danish. Goldsmith's poems, edition of 1807. November 9, 1898 .....(137)

Holland, Dr. W. J., Pittsburgh, Pa. Collection of Insects. September 1, 1898 .....(131)

Jackson, S. H., Wilkinsburg, Pittsburgh, Pa. Seven specimens of United States fractional currency; 15 State bank notes. December 9, 1898. (140)

Lehman, Geo. M., Pittsburgh, Pa. Relief map, Island of Navassa, West Indies. April 6, 1898 .....(123)

Relief map, southwest end of northern anthracite coal field of Pennsylvania. April 6, 1898 .....(124)

Magee, Mrs. W. A., Pittsburgh, Pa. Alaskan basketry, 23 pieces. September 12, 1898 .....(133)

McGue, Francis J., Pittsburgh, Pa. Wood carving—chain, fan, etc. March 8, 1899 .....(146)

Read, Capt. James Charles, U. S. N. Relics of the Spanish-American war, secured by Capt. Read at Porto Rico and Cuba while in command of United States Army transport ships. December 1, 1898. (139)

Schwan, A. E., Pittsburgh, Pa. Chinese scales, in wooden case, for weighing gold. February 21, 1899 .....(145)

Scott, T. F., Pittsburgh, Pa. Ancient firearms—double-barreled pistol, and muzzle-loading revolver. September 9, 1898 .....(132)

Sennett, Hon. George B., Youngstown, O. South American agates, 42 specimens. May 4, 1898 .....(125)

Shafer, John A., Pittsburgh, Pa. Thirty agates and other varieties of quartz. May 25, 1898 .....(126)

Shaver, Newvill, Robertsdale, Huntington Co., Pa. American coins 11 specimens. October 14, 1898 .....(134)

Siviter, Mrs. W. H., Pittsburgh, Pa. Mementoes of the civil war, viz.: letter from Wm. H. Seward concerning pardons, written while the State Department was in mourning for Lincoln; letter from Lincoln; cockade worn by the chairman of the reception committee of the loyal citizens of Richmond to receive the Union troops on their entrance into Richmond; collection of autographs of the President, Cabinet, Senators, and Congressmen during the civil war; bronze medal presented to Maj. Anderson by the citizens of New York City in recognition of his defense of Fort Sumter; map used by General Grant in his campaign around Richmond; letter from John Hay. November 3, 1898 .....(136)

Smith, Herbert H. Ancient South American pottery, from United States of Colombia. March 18, 1899 .....(148)

Stewart, Douglas, Allegheny, Pa. Head of Egyptian mummy; executioner's knife, China; native knife, from the Philippines. February 11, 1899 .....(144)

Woodwell, Mrs. W. E., Pittsburgh, Pa. Japanese swords, two specimens, with carved ivory scabbards; 3 hari-kari knives, carved ivory, from Japan. October 25, 1898 .....(135)

Young, Dr. H. Dudley, Pittsburgh, Pa. Mexican curios, 26 objects. January 16, 1899 .....(141)

ACCESSIONS TO LIBRARY OF THE CARNEGIE MUSEUM.

From April 1, 1898, to April 1, 1899.

Academy of Natural Sciences, Philadelphia, Pa. Manual of Conchology, continuation by Henry A. Pilsbry, Part 67, First Series; Part 43, Second Series. Purchased. May 4, 1898 .....(162)
Proceedings, Academy of Natural Sciences, Part I, January, February and March, 1898. Donated. May 18, 1898 .....(170)
Manual of Conchology, continuation by H. A. Pilsbry, Part 68, completing Vol. XVII, the last of the First Series; Part 44, Second Series, completing Vol. XI. Purchased. December 19, 1898....(220)
Manual of Conchology, Second Series, Part 45, continuation by H. A. Pilsbry. Purchased. March 17, 1899 .....(238)

Academy of Science and Art of Pittsburgh. A Bibliography of the Anthropology of Peru, by Geo. A. Dorsey; List of a Collection of Shells from the Gulf of Aden obtained by the Museum's East African Expedition, by Dr. W. H. Hall and D. G. Elliott, F. R. S.; List of species of Mammals, etc., etc., by D. G. Elliott, F. R. S. (Publications Nos. 23, 26 and 27, Field Columbian Museum, Chicago, Ill.). April 17, 1898 .....(157)
Report and Results of Observations for the Year 1897, The Fernley Observatory, Southport. May 4, 1898 .....(161)
Sur l'emploi de Desinences caracteristiques dans les denominations des groupes etablis pour les classifications zoologiques, par Ch. Janet; Sur les limites morphologiques du tegument et sur la situation des membranes articulaires chez les Hymenopteres arrives a l'etat d'imago, par C. H. Janet; Etudes sur les Fourmis, les Guepes et les Abeilles, Notes 14, 15, 16, par Ch. Janet; Notice sur les travaux scientifiques presentes par M. Ch. Janet a l'Academie des Sciences au Concours de 1896 pour le Prix Thore. (6 pamphlets.) June 16, 1898 .....(173)
Anales del Museo Nacional de Montevideo, (Tomo II, Fas. VIII), 1898; The Cultivated Vetches (Circ. 25, Division of Agrostology, Department of Agriculture). June 23, 1898 .....(176)
United States Geological Survey, Eighteenth Annual Report, Part V, Mineral Resources, in two bound parts. June 23, 1898....(177)
Boletin Mensual Meteorlogico y Agricola del Observatorio Central del Estado de Veracruz Llave, November, 1897. July 13, 1898. (183)
Fortieth Annual Report of the Chicago Academy of Sciences for the year 1897. July 26, 1898 .....(185)
Bulletin of the Geological Institution of the University of Upsala, Vol. III, Part 2, No. 6, 1898. August 1, 1898 .....(187)

Academy of Science and Art of Pittsburgh—Continued.

A Report on the Grasses and Forage Plants and Forage Conditions of the Eastern Rocky Mountain Region, by Thomas A. Williams, (Bulletin No. 12, Agros. 31, U. S. Dept. of Agriculture.) August 10, 1898 ..... (192)

Ruins of Xkichmook, Yucatan, Publication 28, Field Columbian Museum, July, 1898; Oberlin College Laboratory Bulletin No. 9, June 15, 1898. September 24, 1898 ..... (198)

The Mollusca of the Chicago Area, the Pelecypoda, by Frank Collins Baker. (The Chicago Academy of Sciences.) Bulletin No. III, Part 1, of the Natural History Survey. January 24, 1899 ..... (225)

Anales del Museo Nacional de Montevideo, Tomo III, Fasciculo IX, 1898. September 27, 1898 ..... (200)

The Artist, Vol. XXIII, No. 225, September, 1898; Boletin del Observatorio Astronomico Nacional de Tacubaya, Vol. II, No. 4, 1898. October 4, 1898 ..... (201)

Boletin Mensual Meteorologico y Agricola del Observatorio Central del Estrado de Veracruz Llave, December, 1897. January 26, 1899. (227)

Anales del Museo Nacional de Montevideo, Tomo III, Fas. X, 1898; Annual Report of the Director, Field Columbian Museum, 1897-98. February 4, 1899 ..... (229)

American-Irish Historical Society. The Journal of the American-Irish Historical Society, Vol. I, 1898. December 8, 1898 ..... (218)

American Microscopical Society. Proceedings, American Microscopical Society, one set, Vol. I, to XIX inclusive (Vol. VI excepted). August 8, 1898..... (191)

Proceedings of the American Microscopical Society, Vol. VI, 1884. September 10, 1898 ..... (197)

Anderson, E. H., Librarian, Pittsburgh, Pa. Offizieller Fuhrer durch das Schweizerische Landesmuseum, by Dr. H. Lehmann, Directorial Assistant. March 11, 1899 ..... (236)

Bernice Pauahi Bishop Museum, Honolulu, Hawaiian Islands. Director's Report. (Occasional Papers of the Bernice Pauahi Bishop Museum of Polynesian Ethnology and Natural History, Vol. I, No. 1, 1898.) March 22, 1899..... (241)

Birge, E. A., Madison, Wisconsin. On the Instincts and Habits of the Solitary Wasps, by George W. Peckham and Elizabeth G. Peckham. (Bulletin No. 2, Wisconsin Geological and Natural History Survey.) March 22, 1899 ..... (241)

Blatchley, W. S., Indianapolis, Ind. Eight volumes and two maps of Reports of the Indiana State Geologist, 1886-97. December 30, 1898. (222)

Carnegie Library, Pittsburgh, Pa. Second Annual Report of the Board of Trustees of the Carnegie Library of Pittsburgh, 1898. July 2, 1898 ..... (181)

Monthly Bulletin of the Carnegie Library of Pittsburgh, Vol. III, No. 7, July, 1898. July 26, 1898 ..... (186)

Carnegie Library, Pittsburgh, Pa.—Continued.

Monthly Bulletin of the Carnegie Library of Pittsburgh, Vol. III, No. 8, October, 1898. October 14, 1898 .....(203)
Monthly Bulletin of the Carnegie Library of Pittsburgh, Vol. III, No. 9, November. 1898. November 29, 1898 .....(214)
Bulletin of the Carnegie Library of Pittsburgh, Vol. IV, No. 1, January, 1899. January 25, 1899 .....(226)
Monthly Bulletin of the Carnegie Library of Pittsburgh, Vol. IV, No. 3, March, 1899. March 25, 1899 .....(243)

Cincinnati Museum Association, Cincinnati, O. Seventeenth Annual Report, 1897. June 23, 1898 .....(174)
Society of Western Artists Third Annual Exhibition, 1898-99. January 26, 1899 ....(228)
The Religious Significance of Sculpture and Painting among the Ancient Egyptians, by Wm. Groff. March 15, 1899 .....(237)

Clapp, George H., Pittsburgh, Pa. The Sixth Year-Book of the Brooklyn Institute of Arts and Sciences, 1894; The Health Magazine, November, 1897 (No. 5, Vol. V); The Ironmonger, May, 1898 (The Iron and Steel Institute, London Meeting, extra); Knowledge (London), May, 1898 (No. 151, Vol. XXI); Journal of Applied Microscopy (No. 4, Vol. I), April, 1898; The Mining Bulletin, July and October, 1897 (Nos. 4 and 5, Vol. III); The Mining Bulletin, December, 1897 (No. 6, Vol. III). June 23, 1898 .....(175)
The Kotchkar Gold Mines, Ural Mts., Russia, by H. B. C. Nitze and A. W. Purington; Some Dike Features of the Gogebic Range, by C. M. Boss; The Relation of the Strength of Wood under compression to the Transverse Strength, by B. E. Fernow; Proceedings of the Seventy-fourth (Twenty-eighth Annual) Meeting; Mining Districts of Colombia, by Henry G. Granger and Edw. B. Treville; An Apparatus for the Removal of Sand from Waste-Water of Ore-Washers, by J. E. Johnson, Jr. (Separata from the Transactions of the American Institute of Mining Engineers Atlantic City Meeting, February, 1898.) June 23, 1898 .....(178)
Natural History of Man, Vols. I and II, by James Cowles Prichard, M. D., etc.; Types of Mankind, by J. C. Nott, M. D., and George R. Gliddon; Ancient Bronze Implements of Britain and Ireland, by John Evans, D. C. L., etc. (All bound volumes). Nov. 3, 1898..(208)

Field Columbian Museum, Chicago, Ill. Set of Publications (Field Columbian Museum) to No. 27 (exclusive of Nos. 1, 2, 8, 14, 15). August 23, 1898 ....(196)
Ruins of Xkichmook, Yucatan, Publication 28, Field Columbian Museum, July, 1898. September 24, 1898 .....(199)
Annual Report of the Director, Field Columbian Museum, 1897-98. February 4, 1899 ....,(230)

Gratacap, L. P. Museums of Natural History, by L. P. Gratacap. (Reprinted from Science, N. S., Vol. VIII, pp. 29-37, July 8, 1898, and No. 185, pp. 61-68, July 15, 1898.) August 8, 1898 .....(189)

Hamilton. Mrs. Dr. John, Allegheny, Pa. The Entomological News, Vol. VIII, 1897, containing portrait of the late Dr. John Hamilton. April 30, 1898 ..... (158)

Hathaway, Jas. T., New Haven, Conn. Manual of the Families and Genera of North American Diptera, by Samuel W. Williston. Purchased. December 19, 1898 ..... (221)

Holland, Dr. W. J., Pittsburgh, Pa. Monthly List of Publications, August and September, 1898 (United States Department of Agriculture, Division of Publications); Crop Circular for September, 1898 (United States Department of Agriculture, Division of Statistics). October 14, 1898 ..... (204)

Iron City Microscopical Society, Pittsburgh, Pa. Report, United States National Museum, 1895. May 12, 1898..... (167)
Report of the Birds Recorded during a Visit to the Islands of Santa Barbara, San Nicolas, and San Clemente, in the Spring of 1897, by Jos. Grinnell; Birds of the Pacific Slope of Los Angeles County, by Jos. Grinnell. (Pasadena Academy of Sciences, Publications Nos. I and II.) August 3, 1898 ..... (188)

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THE CARNEGIE MUSEUM

PITTSBURGH

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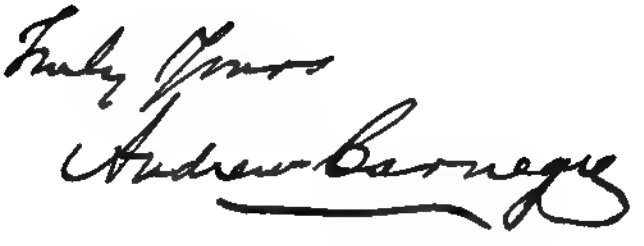
ANNUAL REPORT OF THE DIRECTOR

FOR THE

YEAR ENDING MARCH 31, 1900

1900



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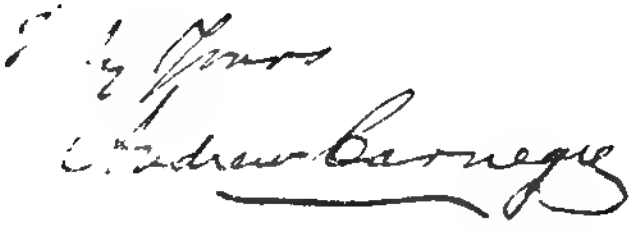

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MURDOCH-KERR PRESS,
PITTSBURGH.

THE CARNEGIE INSTITUTE, 1899.
(From photograph by A. S. Coggeshall.)

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W. J. HOLLAND, Ph.D., LL.D., etc.

LETTER OF TRANSMITTAL.

MR. C. C. MELLOR,

Chairman of the Committee on the Museum of the Board of Trustees of the Carnegie Institute.

DEAR SIR:

It gives me pleasure herewith to submit to you the third annual report, which I have had the honor of preparing as Director of the Museum.

As in former years, I attach to this report a financial statement, showing the receipts and expenditures for the year. Appended to this report is a list of the accessions, which have been purchased, secured by the efforts of the staff, donated, or loaned to the Museum.

I should fail to show a proper sense of gratitude, were I not to take this occasion to express to you and to your colleagues of the Committee the very profound appreciation which is felt by the entire staff of the Museum and by myself, for the exceedingly kind and courteous treatment, which we have uniformly experienced in our relations with yourself and the Committee, of which you are the Chairman. I am, very respectfully,

W. J. HOLLAND,
Director.

Carnegie Museum, March 31st, 1900.

ANNUAL REPORT UPON THE CONDITION AND PROGRESS OF THE CARNEGIE MUSEUM IN PITTSBURGH.

Submitted March 31st, 1900.

By W. J. Holland, Director.

The work of the Carnegie Museum during the year, which has just closed, has been more extensive in its scope, and, I believe, more productive in results, which are calculated to advance the boundaries of human knowledge, and to serve the purposes of popular instruction, than in any preceding year. The labor accomplished has sometimes been performed in the face of difficulties, arising from the illness of one, or the other, member of the staff, and from the impossibility, owing to our comparatively limited resources, of always securing the amount and kind of labor, which it might have been desirable to have obtained. The Staff of the Museum is larger than ever; nevertheless, in some departments of work the need of trained and expert assistants has been deeply felt. In spite of the fact that we have thus been handicapped in some fields of effort, and in spite of some temporary loss of time through illness, the results achieved will be found, I think, to compare very favorably with the work of other similar institutions, some of which are possessed of much larger resources than are at our disposal. It has been the endeavor of the Director, and he has been ably seconded by his assistants, to make every dollar of expenditure tell in the direction of increasing the extent and value of the possessions of the Museum.

An inventory of these possessions is herewith submitted:

STATEMENT OF THE PERSONAL PROPERTY, OR ASSETS, OF THE CARNEGIE MUSEUM, APRIL 1st, 1900.

Collections purchased and made by the Museum, cost	$ 44,273.49
Collections donated, of which the cost to the donors is known	30,950.00
Exhibition-cases, cost	16,760.90
Furniture, cost	483.50
Boxes, Trays, Storage-cases, etc., cost	404.50
Library.. { Books donated, 900.00 / Books purchased, $1,147.75 }	2,047.75
Photographs and Frames, cost	273.41
Photographic Apparatus, cost	193.41
Laboratory-fixtures, cost	1,098.97
Tools, cost	113.62
Total	$ 96,599.55
Collections deposited with the Museum as loans, valued at	33,800.00
Total	$130,399.55

The foregoing inventory is based upon the books of the institution, which have been carefully kept, and shows, I think, a very gratifying condition of affairs, in view of the fact that the total sum of the appropriations from the general fund for the support of this branch of the Institute have only aggregated, since the Museum was established, the sum of seventy-five thousand five hundred dollars. For the excess in value of our collections over this amount we are largely indebted to the generosity of the kind founder of the institution. While his benefactions have been great, we are not, however, oblivious to the fact that many others have contributed very generously, and the Museum has been the recipient of a constant stream of minor gifts, to which no financial value has been attached by the donors, and which are not taken into account in the foregoing statement, but which in the aggregate, if appraised at a just valuation, would considerably increase the total sum, which is given in the inventory.

As to the condition of your property, I may report that it is most excellent, every effort having been put forth to secure the best results, so far as the preparation of material and its permanent preservation are concerned. In the ease of one or two collections, which were received, and which proved to be somewhat infected with museum-pests, we have had considerable trou-

ble, but I am happy to report that all danger of further infection from this source is over, the collections having been taken in hand and vigorously treated under the direction of Mr. Webster, so that it is believed that they have been thoroughly disinfected. It is needless to observe that great vigilance and systematic effort are required to keep collections, like those entrusted to our care, free from danger of destruction by the ever-ready hordes of the lower insect-world. A museum is not like heaven, in which "moth and rust do not corrupt," and, I am sorry to say, is not like heaven in another respect, for we have discovered—at least in one instance—that thieves will "break through and steal."

VISITORS.

On the first day of last June I placed in the Museum, where it could be conveniently found, a Visitors' Register, properly ruled, with a view to obtaining information, partly as to the number of visitors and the localities which they represent, and more particularly to ascertain to what extent the Museum is frequented by teachers and schools. So far as the attendance of the teachers and scholars of the schools is concerned the Register has not given us as satisfactory results as we had expected, for a great many teachers have failed to use it in the way that was intended. Although the Register has been open only nine months, and a very small proportion of the persons visiting the Museum have utilized it, the results of an examination of the book are very interesting. Every State in the Union except Maine, Mississippi, North Dakota, Washington, Oregon, and Nevada, is represented upon the register. Oklahoma and Alaska appear together with Cuba and the Philippine Islands. Visitors have registered from the following foreign countries: Ontario, Quebec, Nova Scotia, England, Scotland, Ireland, Germany, Holland, France, Switzerland, Italy, Austria, Russia, Egypt, India, Australia, Japan and British South Africa. The attendance of visitors has varied, of course. At times, especially upon Sunday afternoons, the rooms have been crowded even to discomfort. There have been days on which as many as ten thousand persons are estimated to have passed through the rooms. Even on the stormiest and most inclement days there never have been less than a hundred visitors to the Museum. The schools and colleges of Western Pennsylvania have been at times very largely

represented. It is, however, particularly worthy of notice that among our visitors have been a large number of scientific men from kindred institutions, both in America and in Europe, who have come to the Museum for the special purpose of consulting the scientific collections which are in our custody. It is estimated that fully three hundred and fifty thousand persons have entered the doors of the institution during the past year.

THE STAFF.

The personnel of the Museum force has undergone some few changes during the past year. In September Mr. E. B. Williamson, who was employed as an assistant in the department of entomology, resigned his position, and the vacancy has not been filled. In June Dr. J. L. Wortman was employed to serve as Curator in the Department of Vertebrate Palæontology, for the creation of which department Mr. Carnegie had, with great generosity, placed a fund at the disposal of the Director. In February of the current year the resignation of Dr. Wortman was presented and accepted, and Mr. J. B. Hatcher of Princeton University, was appointed as Dr. Wortman's successor. The Staff as at present constituted consists of the following persons, in addition to the Director, who, besides discharging the executive duties of his office, is serving as the Curator of Entomology.

Mr. Douglas Stewart, Assistant in the Office of the Director.

Mr. J. B. Hatcher, Curator of Palæontology and Osteology.

Messrs. W. H. Reed and O. A. Peterson, Assistants in the Department of Palæontology.

Mr. Arthur S. Coggeshall, Chief Preparator in the Department of Palæontology.

Mr. Louis S. Coggeshall, Assistant Preparator in the Department of Palæontology.

Mr. J. A. Shafer, Assistant in charge of the Botanical Collections.

Mr. W. E. C. Todd, Assistant in charge of the Collections of Recent Vertebrates.

Mr. F. S. Webster, Chief Preparator in the Department of Zoology.

Mr. Gustav A. Link, Assistant Preparator in the Department of Zoology.

Mr. Theodore A. Mills, Sculptor and Modeler in the Department of Ethnology.

Miss M. J. Stribling, Stenographer.

Miss Rosa Sahrrhage, Assistant in the Department of Botany.

Mr. W. W. Worthington, Field Collector in the Department of Zoology.

Mr. Wilson Banks, Modeler in the Department of Preparation.

Provision has been made by Mr. Carnegie for the payment of the salaries of the gentlemen employed in the Department of Palæontology, with the exception of the Curator, whose salary is paid from the general fund.

Assistance has been derived from time to time, as in previous years, from individuals who have without remuneration helped in obtaining, or in arranging, collections for the Museum. I desire in this connection to especially recognize the efforts of Mr. D. A. Atkinson, who has, while pursuing his studies in the Medical Department of the Western University of Pennsylvania, devoted considerable time to the Museum, and to whom we are indebted for valuable services. From different members of the Botanical Society of Western Pennsylvania we have also received kind assistance in the Department of Botany.

MAMMALS.

The collection of mammals in the Museum numbers about eight hundred specimens, of which two hundred and forty-three specimens have been added to the collection during the past year. The most important additions made since my last report consist of specimens obtained through Mr. Herbert H. Smith from Colombia, South America; a number of specimens collected in Wyoming by Mr. L. E. Burnett and by the Carnegie Museum Expedition to Wyoming; the specimens collected in Pennsylvania by Mr. Todd, of the Museum, and gentlemen employed by him in Somerset and Potter counties, Pennsylvania; and a number of donations received from the Zoological Garden under the care of the Director of the Department of Public Works of the City of Pittsburgh, whose kindness in ordering all animals which die in the Garden to be turned over to the Museum is worthy of special recognition. Though dead they still speak lessons of instruction to the people whom they amused and interested

while they were alive. The mammals known to occur within the limits of our State, with the exception of a few species, which are rare, or which are still only occasionally found within the limits of the Commonwealth, are all found in the collection. It is now desirable for us to reach out and endeavor, as rapidly as possible, to acquire collections representing the mammalian fauna of the entire continent. This is a work of much magnitude, and will require time, patience, and a considerable expenditure of money.

A number of the mammals have been mounted, among the more important specimens being an exceedingly fine African lioness, shot by Mr. W. H. Brown, presented by him to the Museum, and mounted by Mr. Webster. The group by Jules Verreaux, obtained in exchange from the American Museum of Natural History, was carefully remounted by Mr. Webster and installed in a case last November. This group proves very attractive, especially to younger visitors, and through Mr. Webster's skilful manipulation it is in even better condition than when originally set up by the taxidermist .

BIRDS.

According to the list submitted by Mr. Todd, who is in charge of our collection of birds, under date of February the 21st, the collection consisted at that time of 4,587 specimens, skins and mounted examples. Of these 2,919 belong to the North American Series; 1,668 belong to the exotic series. Since the date of this report 612 North American specimens have been acquired and 351 specimens added to the exotic series, bringing the total up to 5,550 specimens.

Of the birds, known to inhabit Pennsylvania, or to occasionally appear within the limits of the State, we have representatives of all but about a score of species. Not all of these species are, however, represented by Pennsylvanian specimens, and in the case of birds, which are only rarely found as stragglers within the limits of the State, it may be a long time before our collection can be perfected with material collected within the limits of the Commonwealth. Of the birds, known to occur in North America north of the Rio Grande of Texas, numbering about eleven hundred species and sub-species, we have about four hundred species represented in the collection. It is very desirable that this collection should, like that of the North American mammals, be in-

creased as rapidly as possible. Important additions to the collection were made during the past year through the labors of Mr. Todd in Pennsylvania, Mr. Percy Shufeldt at Smith's Island, Virginia, and in Mexico, the Expedition to the fossil-fields of Wyoming, and by gift from the Zoological Garden. Mr. Percy W. Shufeldt's large collection of the warblers of the Eastern United States has been secured by purchase. Collections both of birds and mammals have been made for the Museum by Mr. H. H. Smith in Colombia, South America, but owing to the revolution now going on in that country, it has been impossible for Mr. Smith to ship to us the material, which he has collected, and important accessions, which would have been received from this source, and which are in fact the property of the Museum, have not yet come to hand. Particular mention should be made of a collection of the birds of Allegheny county presented by Mr. D. A. Atkinson, including many of the rarer local species. The collection of birds' eggs in the possession of the Museum has also been enriched by the gifts of Mr. Atkinson, and the whole has been rearranged by Mr. Todd, carefully labelled, and placed upon exhibition in the room devoted to the birds, where they form a very attractive exhibit.

Mr. Webster has completed and installed a number of important groups in this department, one representing the famous setter dog, "Count Noble," flushing a covey of quails. Near this group have been placed minor groups, representing the common cherry-bird, the robin, the Baltimore-oriole, the chestnut-sided warbler, and the golden-winged warbler. In each case the nests and eggs of these birds are displayed. In the spring of last year Mr. Webster was sent to Florida and collected the material for an important group of pelicans, which he is at present engaged in constructing.

REPTILES AND BATRACHIANS.

Considerable additions have been made to our collection of reptiles and batrachians, principally through the gifts of Mr. Atkinson and of Mr. V. J. Zarobsky and a number of friends of the institution, who have kindly, from time to time, presented specimens, which were obtained in the vicinity of Pittsburgh. Besides these donations we have obtained important collections in this branch through Mr. Webster, who succeeded in Florida in

securing for the Museum some fine examples of the American crocodile and the alligator, as well as a number of snakes. A few specimens of reptiles were also collected in the Rocky Mountains by the Expedition of 1899.

FISHES.

No very considerable addition was made during the past year to our collection of fishes, though an interesting and beautiful series of casts, carefully colored, representing the game-fishes of America was purchased from Ward's Natural Science Establishment at Rochester, N. Y. From Mrs. Lucy Carnegie we received a magnificent mounted specimen of the tarpon, of which she was the captor. The department of ichthyology has not kept pace with other departments of the Museum, partly because of the fact that we have had no one connected with our staff, who is as familiar with this branch of science, as is desirable, and partly because of the limited opportunities which exist in our vicinity for adding to the collection.

MOLLUSCA.

A number of additions have been made to the collection of Mollusca, among them an extensive series of land-shells collected by Mr. Webster in Florida. Our collection, however, though large and important, has not received much attention beyond that necessary to its careful preservation during the past year, as no member of the staff is expert in conchology .

INSECTS, ETC.

Considerable additions have been made to the collection of insects owned by the Museum, or on deposit. The Director has added to the collection of Insects which he has placed in the Museum several important collections made in the Philippines and other islands of the Eastern Archipelago, and the collection purchased from the Rev. S. Hall Young, made by him in the Valley of the Yukon, an account of which has been published in the Entomological News. The collection contains the types of a number of new species and varieties. In addition several thousands of specimens have been added to the collection which were purchased by the Director from Mr. Herbert H. Smith, collected

in the United States of Colombia, sixteen hundred specimens collected by C. H. Tyler Townsend in northern Mexico, collections made by F. Lucock in Texas, collections made in Colorado by Ernest J. Oslar, in Wyoming by L. E. Burnett, in Labrador by Rev. A. Stecker, in Jamaica by Rev. C. H. Baker, and in Hayti by H. D. Chipman. The general collection of North American species has been greatly increased by purchases made from local collectors and by important additions made by the members of the Staff of the Museum in this locality and elsewhere.

CRUSTACEA.

A large number of specimens, representing species found in the valley of the Ohio, were secured during the past year, and a few of the peculiar species of the Western rivers were obtained by the Expedition to Wyoming.

BOTANY.

Since my last report the Western Pennsylvania Botanical Society has considerately turned over to the Museum its large and important herbarium, representing the plants of Western Pennsylvania, with the understanding that the collection shall at all times be accessible to the members of the Botanical Society and that the authorities of the Museum shall properly care for the collection. We were given the privilege of incorporating this collection with our own, designating the specimens received by a label, distinguishing them as the gift of the Botanical Society. In the fall we obtained by purchase a large collection of plants made by Mr. A. Commons, of Wilmington, Delaware, numbering approximately eleven thousand species. This collection is important because containing numerous sets of specimens collected, determined, and distributed by well-known American botanists during the past fifty years. In addition we have obtained by purchase from Prof. Aven Nelson, of the University of Wyoming, a large collection of the plants of that State, numbering some eight hundred and fifty species, very carefully determined and well prepared, and we have arranged with him to purchase a set of the plants of the National Park which he is distributing. From Mrs. M. Z. Hough we obtained a small series of very well preserved plants collected in Arizona. Other collections of plants

were made by members of the staff, by the Director in Wyoming, by Mr. Webster in Florida, and by Mr. Shafer in the vicinity of Pittsburgh. Mr. Shafer has devoted a great deal of time with commendable fidelity to the work of mounting the botanical material and correctly classifying it. For its proper preservation the Director has purchased some five hundred boxes made after the design of Mr. Shafer, which, it is believed, will insure the exclusion of dust and enable us to preserve these collections in beauty and freshness. It will be seen from the foregoing that our botanical collection representing the plants of North America has, during the past year, made a great advance, and while there are still lacking many species known to occur within the limits of the United States, it is no exaggeration to say that five-sixths of the plants of the flora indigenous to the country are now represented in the collections of the Museum.

MINERALOGY.

Little has been done recently to advance our collections in mineralogy. We have, however, received some important additions during the year. Among other collections, which are worthy of special notice I may mention a large series of minerals which belonged to the late Mr. C. P. Krauth, and which were kindly presented to the Museum after his death by Mrs. Krauth. The specimens for the most part represent European localities, and are very accurately labelled, which gives value to the collection. From the Carnegie Steel Company we received the gift of a series of specimens representing the iron-ores which have been in the past, or are now being used in the manufacture of iron and steel. These specimens were accompanied in each case by a chemical analysis, thus heightening the value of the collection. Many gifts of single specimens were obtained from various individuals, and though no very striking advance can be recorded in this department, nevertheless a very creditable addition to the number of species is shown by an examination of our lists.

GEOLOGY AND PALÆONTOLOGY.

Through the generosity of Mr. Carnegie a fund was placed at the disposal of the Director of the Museum in the spring of 1899 for the purpose of initiating and carrying on palæontological researches in the region of the Rocky Mountains. Mr. Carnegie

was led to take this step by the conviction that important results may be confidently anticipated from labors carefully conducted in this field, with which he had become somewhat familiar through his acquaintance with Prof. Marsh, of New Haven, and other eminent scientific men. The Director of the Museum made two visits to Wyoming in the spring of 1899, and arranged to secure the services of Mr. W. H. Reed, who for a long time had collected for Prof. Marsh, of New Haven. He subsequently visited New York, and, with the approval of the Trustees, arranged to employ Dr. J. L. Wortman, formerly connected with the American Museum of Natural History, and Mr. Arthur S. Coggeshall, preparator in the latter institution, to enter into the service of the Carnegie Museum. Dr. Wortman, accompanied by Mr. Coggeshall, went to Wyoming and assumed charge of the work early in June. Later in the summer the Director, accompanied by Mr. E. B. Williamson, visited Wyoming and spent a few weeks on Sheep Creek, at Camp Carnegie, as we have called the locality. The efforts of Dr. Wortman, Mr. Reed and Mr. Coggeshall were highly successful, resulting in the discovery of what is believed to be the most perfect skeleton of a diplodocus yet found, and the discovery of a considerable deposit of the remains of other dinosaurs, one of which vastly exceeds in size any which have heretofore been reported. Steps have been taken to secure the land upon which these discoveries have been made. The immediate results of the expedition were the recovery of the first skeleton, that of the diplodocus, to which I have referred, the exhumation of the skeleton of a brontosaurus, much of this being in a remarkably fine condition of preservation, the recovery of a large portion of the skeleton of a stegosaurus, and of the hind limb and foot of a brontosaurus, which enables us to rectify some errors in regard to the structure of the feet of dinosaurs into which palæontologists have fallen through the lack of material as perfect as that which we have obtained. In addition, the expedition under Dr. Wortman recovered a fine specimen of Baptanodon, which is at present in the keeping of Dr. Henry F. Osborn, of the American Museum of Natural History, who desired it for purposes of study. Other vertebrates and numerous specimens of fossil invertebrates were found and were brought home by our exploring party. In carrying on the important work, which was done in the western country, we owe a great debt of

gratitude to the President of the Union Pacific Railway Company, Mr. Horace Burt, to Mr. E. L. Lomax, the General Passenger Agent, and to Mr. A. Darlow, of the same Company; to Mr. Marvin Hughitt, the President of the Chicago & Northwestern Railway Company; and to Mr. James McCrea, the First Vice-President of the Pennsylvania Company, for having generously provided transportation, not only for the members of our party going to the western fields, but also for the transportation to the Museum of the fossils which were collected, and which filled a freight-car.

Upon the return of our expedition, necessitated by the early advent of winter at the high elevation at which our work was being done, the entire force addressed itself to the task of extricating the bones from the matrix, in which they were brought to the Museum. This work has advanced as rapidly as its difficulty has permitted, and already a very considerable collection of vertebrate fossils has been prepared, and we hope ultimately to be able to effect the complete restoration of the skeletons of a number of the huge dinosaurs of the Jurassic and other deposits of the west.

On February the 1st Dr. J. L. Wortman tendered his resignation to the Director, and severed his connection with this Museum, and Mr. J. B. Hatcher, of Princeton University was immediately chosen as his successor. Mr. Hatcher is a graduate of Yale, was a favorite pupil of Prof. Marsh, for whom he worked in the field for many years, until he became the assistant Professor of Geology and the Curator of Palæontology at Princeton University. For seven years he has been connected with the latter institution, during which time he spent three years in the study of the geology and palæontology of Patagonia, winning for himself an enviable reputation as a master in his special field of labor. With the consent of the Trustees the Director has associated with the force, engaged in palæontological work, Mr. O. A. Peterson, who was Mr. Hatcher's companion and assistant in his Patagonian researches, and who has also had very wide and extensive opportunities to study the geology and palæontology of our Western States and Territories. Arrangements have been made for the return at this time to the West of Mr. Hatcher, Mr. Peterson, and Mr. Reed. The work of exhumation in the Jurassic deposits, which was begun last year and attended with such remarkably

successful results, will be continued during the coming summer, and other important work will be undertaken by Mr. Hatcher and Mr. Peterson. We hope in a short time to be able to amass a large and important collection of palæontological material, which will serve to illustrate the wonderful steps through which the animal kingdom, as it exists to-day, has been evolved. No worthier or more important scientific undertaking could have been conceived than that which has been assigned to this Department of the Museum by its generous founder.

COMPARATIVE ANATOMY AND OSTEOLOGY.

During the past year a number of skeletons of vertebrate animals have been secured. Some of these were collected for us by Mr. Herbert H. Smith in South America; others were made by members of the Museum-staff from material donated to the Museum by the Zoological Garden in Pittsburgh, or from material collected in the field. Among the gifts received from the Zoological Garden one of the most important is a dromedary, which was skeletonized by Mr. Webster. The latter also obtained a number of reptilian skeletons in Florida, and has very beautifully prepared a skeleton of the American crocodile, showing the location and arrangement of the dermal plates, a preparation which we believe is unique of its kind. A number of the skeletons in the possession of the Museum have been macerated and bleached, and since my last report a few were articulated by Mr. W. H. Brown, prior to his departure for South Africa. Mr. Hatcher has been designated as the Curator of the collections in Osteology in addition to his duties as Curator of the Department of Palæontology. The relation of these branches of study to each other being very close, it has seemed wise that Mr. Hatcher, who is abundantly qualified to undertake the work, should assume the general oversight of the osteological collections. These collections, together with the very large collection of anatomical models owned by the Museum, have been of signal use, not only to individuals, but to the colleges and schools of the community. The professors of anatomy in the collegiate and post-graduate courses of the Western University of Pennsylvania, the principal of the Pittsburgh Central High School, and others, have constantly employed this material in the work of instructing their classes, and it has always afforded us pleasure to accord them every reasonable facility within our power for so doing.

ETHNOLOGY AND ARCHÆOLOGY.

The collection of models, illustrating the manners and customs of the aboriginal races of North America, has been increased by the addition of a number of groups prepared by Mr. Mills. A large collection of Sioux implements and attire was purchased from Mr. T. H. Richards, and a number of accessions to material representing the early races of the country, consisting of various objects, as well as of photographs and engravings, have been obtained from a number of donors. Through the Pittsburgh Branch of the Egypt Exploration Society a valuable addition was made to our collection, consisting of prehistoric Egyptian pottery, as well as of a number of articles of personal ornament obtained at several localities during the winter of 1898-99. To the generosity of the Duc de Loubat we are indebted for a series of important publications, edited by him, relating to the aboriginal inhabitants of Mexico. We have the assurance from Mr. Carnegie that he will in the near future secure for us casts of some of the more important monumental records of the civilization which was found in Mexico at the time of its first invasion by the Caucasian conquerors of the country.

NUMISMATICS.

A number of minor contributions of interesting pieces have been made to the collection in the Museum, and a considerable series of silver coins has been deposited with us by Mr. James H. Bair, of Steubenville, Ohio. No systematic attempt has been made, however, during the past year, to increase the collection of coins belonging to the Museum.

HISTORICAL COLLECTIONS.

As in previous years, we have from time to time received a number of interesting historical relics and documents. The collection of these things has steadily grown, and, if in connection with the collection of relics an effort were made to gather together in an apartment, adapted to the uses of the student, all of those books which touch upon the history of the region of which Pittsburgh is the metropolis, the Institute would be doing very

much to promote historical research, and to aid the efforts of the Western Pennsylvania Historical Society, the members of which should be encouraged in their labors. It is our hope, that when an addition is built to the Museum giving larger space, such a room, adorned appropriately with relics of the past, and containing a collection of historical books, may be placed at the disposal of those, who are interested in these pursuits, and become the rallying-point, not only for the Historical Society, but for various patriotic organizations, such as the Pittsburgh Chapter of the Daughters of the American Revolution, who are interested in preserving the memorials of the past, and who have done much to aid us in our efforts.

THE TRANSPORTATION EXHIBIT.

During the summer Col. S. H. Church and Mr. C. C. Mellor took steps to establish a collection, which would represent the history of the development of modern methods of transportation, and serve also to throw light upon methods in use among savage races, or employed in the past by civilized races. They had been attracted by a very interesting exhibit of this kind, contained in the United States National Museum at Washington. With the kind co-operation of the authorities of the National Museum we have been able to make a very creditable beginning, having employed for this purpose Mr. Wilson Banks, a skilful workman, who had long been in the employment of the Pennsylvania Railroad Company and of the United States National Museum. We have also obtained by purchase from Mr. C. R. Luscombe, of Washington, a series of models, being reproductions of some, which he made for the United States National Museum. Through the kindness of Mr. Carnegie we have received a model of the first telegraph instrument, made by Messrs. Morse and Vail, which was formerly on deposit in Washington, but which Mr. Stephen D. Vail last fall transferred to Mr. Carnegie.

THE MUSEUM LIBRARY.

Without access to the literature of any branch of science it is impossible for the student to accomplish satisfactory labors, and accordingly a small portion of the funds at the disposal of the Carnegie Library has been this past year expended in purchasing some of the more necessary and indispensable works, to which

access may not be had in any of the libraries in Pittsburgh. Among the more important of these purchases was the Biologia Centrali-Americana, of Messrs. Salvin and Godman, a mine of information of the most accurate scientific character in relation to the lands of tropical North America. In addition to purchases, we have received a considerable number of important volumes from Mr. C. C. Mellor and from the various departments of the United States Government. Mr. Anderson, the Librarian of the Pittsburgh Library, has kindly secured sets of a few of the more important scientific journals published in this country and elsewhere, to which constant reference must be made. The library of the Director, containing some five thousand volumes relating to zoology, has always been at the command of the staff; otherwise some work, which has been done, would not have been possible. It is very much to be desired, either that a fund be raised to purchase the books, which are needed as works of reference in the Museum, or that a portion of the funds at the disposal of the Carnegie Library be systematically set apart for the purpose of securing the great standard works of reference in the department of natural history. A most desirable collection of works, bearing upon the industrial arts, and a fine collection of works, relating to architecture, are in process of formation in this magnificent library, but Western Pennsylvania still lacks, except as they are represented in private hands, and are there more or less difficult of access, a collection of works relating to the natural sciences, such as zoology, botany, mineralogy, and ethnology, which the ever-growing army of students among us require for their work.

THE PRIZE ESSAY CONTEST.

The Fourth Annual Prize Essay Contest was held in December, and a separate report upon this interesting occasion has already been published. The interest and enthusiasm awakened by the occasion exceeded that of all former years. Four hundred and one essays were submitted in competition, and the result of the work was such earnest study of the collections of the Museum, not only by those who entered into the competition, but by their companions and friends, whom they brought with them, as to encourage us to believe that much good is being accomplished by this means. So long as interest in this contest con-

tinues to grow and increase we shall not feel inclined to give up the work. To the eminent men and women who consented to serve as the Board of Judges upon this occasion, we owe a debt of gratitude, and desire most heartily to express our thanks.

THE ANDREW CARNEGIE NATURALISTS' CLUB.

This organization has prospered during the past year. With the advice of the Director Mr. Webster has devoted a couple of hours on two Saturdays of each month to the care of the boys, and has been assisted in this work by all the members of the Staff of the Museum, as well as by a number of friends of the institution. The Club at the present time numbers nearly two hundred boys, ranging in years from nine to eighteen, and they have subdivided themselves into various sections for the purpose of prosecuting their studies during the months of the spring, summer, and fall, some electing mineralogy, some botany, and some zoology in one or the other of its branches, and all seem to be pervaded by a spirit of enthusiasm and happy earnestness, which is very delightful, and which promises to result in the development of a decided taste for the refining and elevating pursuits of the student of nature. The prizes offered last year by different gentlemen connected with the Committee were awarded at a meeting held on the evening of March 2d. The awards were made as follows:

The prize offered by the Director for the best collection of the insects of Allegheny county was equally divided between Ellis M. Frost and Robert F. Foerster.

The prize offered by Mr. John A. Brashear for the best collection of minerals was awarded to G. W. Ulrich.

The prize for the best essay upon a theme relating to natural history, offered by Mr. Webster, was awarded to Max Henrici.

The prize offered by Col. S. H. Church for the best essay upon local history was awarded to Robert F. Foerster.

The prize for the best collection of shells, offered by Mr. Geo. H. Clapp, was awarded to Louis Johns.

The prize offered by Mr. Mellor for the best collection of plants was not awarded, as no collections were submitted in competition.

CIRCULATING COLLECTIONS.

In order to aid teachers in the schools of the city, the Director conceived the plan of preparing a series of small collections of the commoner birds, mammals, insects, and minerals, and placing them in neat and portable cases, correctly labelled, and accompanied by a brief account of each species. A number of these cases have been prepared, and they will be loaned to schools for a limited time, and, when their work has been done in one school, transferred to another. It is believed that this plan, which, so far as we know, has not been attempted by any other institution of like character, will prove to be useful in widening the influence of the Museum, and cultivating accurate knowledge in the schools.

PUBLICATIONS.

An important institution, such as this, sooner or later must undertake the work of publishing to the scientific world the results of the labors performed by the members of its Staff, or by scientific men indirectly connected with it, to whom its collections are made accessible and the subject of study. Ever since assuming the duties of the directorship, I have felt the desirability of initiating such work, and am glad to know that by the action of the Committee the hope, which I have cherished, is about to be realized. It is our purpose shortly to initiate the publication of a series of bulletins and of memoirs, for which we already have material in hand. The publication of these bulletins and memoirs will serve to give the institution standing in the scientific world, and to diffuse knowledge, which has often been laboriously acquired by the scientific gentlemen connected with the Museum. Such publications, when used for purposes of exchange with kindred institutions, will also enable us to greatly add to the body of current scientific literature in our possession, thus increasing the facilities of our library.

THE WORK FOR THE ENSUING YEAR.

As in previous reports, so in this, I must gratefully acknowledge the wise counsel and generous assistance of the founder of the institution, without whose help much that we have done, especially in the field of palæontological research, would have been

wholly impossible. We are profoundly indebted to him for his words of cheerful encouragement and his ever ready helpfulness. Through his assistance, as I have already pointed out, we shall be enabled to continue the work of exploring the fossil-fields of the west and I hope possibly to even extend our researches over wider areas.

It is very important that the appropriation made by the Board last year should be maintained at the same figure, if possible. As I have already pointed out in previous paragraphs of this report, we have been prevented from doing some things, which really ought to have been done, because of our inability to command at times the services of men of learning, who might be employed at least for a portion of their time, in working upon our collections, and in adding to these collections material, which it is desirable for us to obtain. It must not be forgotten that while a considerable proportion of our annual expenditure is devoted to the payment of salaries, these salaries are not expended for the performance of purely administrative duties, but they represent productive labor, which is devoted to the making of collections, or to enhancing the value of collections already obtained. Fully seventy-five per cent. of the amount expended in salaries represents effort in securing, or in preparing, material which remains as the permanent property of the institution, and there is thus a substantial addition annually made to the assets of the Museum.

It is to be hoped that the time will ultimately come when we shall be able to organize an efficient staff for service in each department, which is represented in an institution like this, having a thoroughly trained and experienced Curator in charge of each, as is now the case in the Department of Palæontology, and thus organized and well equipped, this Museum, which has already taken a prominent place among kindred institutions, will come to the fore-front as one of the leading institutions of its kind in the world.

FINANCIAL STATEMENT

OF THE

CARNEGIE MUSEUM, PITTSBURGH, PENNA.

April 1st, 1899—April 1st, 1900.

RECEIPTS.

1899.				
April	1.	To Balance on hand.....	$ 81	50
		" Annual Appropriation	23,500	00
July	1.	" Sundry Refunds account Freight....	12	47
Nov.	8.	" Refund account Freight.....	9	50
1900.				
April	1.	" Am't to correct error in books made 1897		03
			$23,603	50

DISBURSEMENTS.

1900.				
March 31.	By	Salaries	$10,568 60	
	"	Labor	8 50	
	"	Books and Periodicals.	714 49	
	"	Office Supplies, Stationery, etc	65 62	
	"	Postage and Telegrams	80 08	
	"	Packing and unpacking	6 15	
	"	Freight and Expressage	286 11	
	"	Exhibition Cases.....	4,685 79	
	"	Glassware	1 00	
	"	Alcohol, Drugs, etc...	145 87	
	"	Boxes, Trays, etc.....	7 90	
	"	Printing, Labels, etc..	557 49	
	"	Photographs, Frames, etc...	43 04	
	"	Laboratory Fixtures...	510 36	
	"	Miscellaneous Laboratory Supplies	151 88	
	"	Purchase of Sundry Collections	3,968 04	
	"	Prize Essay Contest...	333 76	
	"	Taxidermic Laboratory Supplies	121 89	
	"	Furniture	46 50	
	"	Tools	108 97	
	"	Telephone Rental	23 35	
	"	Traveling Expenses & Carfares	61 57	
	"	Storage	75 00	
	"	Photographic Apparatus	70 41	
	"	Repairs	53 00	
	"	Ammunition and Collecting Material..	35 45	
	"	Revenue Stamps	3 55	
	"	Dues as Member of Museums Association	5 22	
	"	Herbarium Supplies...	188 35	
	"	Appropriated for the Publication of the "Bulletins" and "Memoirs of the Carnegie Museum"	600 00	$23,527 94
		Balance in hand..		$75 56

STATEMENT

OF THE

CONDITION OF THE SPECIAL FUND PROVIDED BY MR. ANDREW CARNEGIE FOR PALÆONTOLOGICAL RESEARCH.

1900.

March 31.	Dr.	To Amount Pledged by Mr. Carnegie, May, 1899.....	$10,000	00
	"	Interest on daily balances of portions of the fund drawn from time to time and deposited subject to check.....	100	00
	"	Sundry Refunds account Freight, Land, etc.....	435	83
			$10,535	83
	Cr.	By Expended for Salaries, Labor, Purchase of Land, Camp Outfit and Supplies, Tools, Hauling, Freight, Travelling Expenses, etc.....	4,662	00
		Balance .... Available to carry on work from April 1st, 1900—Dec. 31st, 1900.	$5,873	83

REPORT OF THE OFFICER IN CHARGE OF THE CATALOGUE OF ACCESSIONS.

DEAR SIR:

I am pleased to hand you herewith the list of accessions to the collections of the Carnegie Museum made during the fiscal year just closed.

The records show that the aggregate accessions have been as follows:

Permanent accessions 479, comprising 51,298 objects.

Accessions by loan 23, comprising 350 objects.

Accessions to the Library of the Museum 108, comprising 138 bound volumes, and 528 pamphlets.

Several loans, reported in this and previous years, have through the kindness of the lenders become the permanent property of the Museum; a few loans have at the request of lenders been returned to them.

The accompanying pages, giving in alphabetical sequence the names of contributors and lenders, as well as of the employees of the Museum, and persons from whom purchases have been made, show the accumulations of the year in detail. Unless otherwise stated the material is the gift of the individual named, except in the case of members of the salaried staff of the Museum, the collections made by these being properly in the nature of purchases by the institution.

Very respectfully,

JOHN A. SHAFER,
Accession Officer.

To DR. W. J. HOLLAND,
Director Carnegie Museum.

PERMANENT ACCESSIONS TO THE CARNEGIE MUSEUM.

From April 1, 1899 to April 1, 1900.

Allen, F. J., Pittsburgh, Pa. Limestone nodule from Squirrel-Hill, Pittsburgh. April 20, 1899.....(915)

Allison, G. W., Pittsburgh, Pa. Snake (Coluber obsoletus Say); Allegheny County. April 24, 1899.....(925)

Anderson, Charles, Idle Park, Pa. Limonite concretion, Somerset County, Pa. Purchased. Dec. 26, 1899.....(1307)

American Iron and Steel Association, through Jas. M. Swank, Philadelphia. Pig of iron cast in 1751 at the Principio Furnace, Cecil County, Maryland, the first blast furnace erected in the state. This pig was found in the Patapsco River, off Fort McHenry, in 1870, at which time about fifteen tons of iron were recovered from the river. June 15, 1899..... ....(1090)

Atkins, J. W., and M. C. Groscost, Beaver, Pa. Red-tailed hawk (Buteo borealis Gmel.) and great horned owl (Bubo virginianus Gmel.) From vicinity of Beaver, Pa. April 29, 1899.....(927)

Atkinson, D. A., Wilkinsburg, Pa. Big brown bat (Adelonycteris fusca Beauv.); Allegheny County. April 10, 1899.....(904)

Neuropteroid larva, Fern Hollow, Pittsburgh. May 9, 1899...(971)

Crayfish (Cambarus dubius Fax.); Fern Hollow, Pittsburgh. May 9, 1899..... ....(972)

Twenty-four amphibians, Fern Hollow, Pittsburgh. May 9, 1899. ....(973)

Two snakes (Thamnophis sirtalis L.); Fern Hollow, Pittsburgh. May 9, 1899.....(974)

Seventeen birds' nests, representing twelve species. May 16, 1899. ....(994)

Nest and four eggs of towhee (Pipilo erythrophthalmus L); collected at Wilkinsburg, Pa. May 16, 1899.....(995)

Three insects collected near Pittsburgh. May 19, 1899.....(1007)

Four crayfish (Cambarus diogenes Gir., and C. bartonii Fabr.); Fern Hollow. Pittsburgh. May 22, 1899.....(1035)

One hundred and ninety-seven insects, Fern Hollow, Pittsburgh. May, 1899.....(1036, 1040, 1067, 1076)

Nest and four eggs of oven-bird, with egg of cow-bird; Fern Hollow, Pittsburgh. May 22, 1899.....(1037)

Rabbit (Lepus sylvaticus Bach.) May 23, 1899.....(1039)

Forty-four amphibians, Fern Hollow, Pittsburgh. May 31, 1899. ....(1068)

Snake (Thamnophis sirtalis L.), turtle (Chrysemys marginata Ag.); Fern Hollow, Pittsburgh. May 31, 1899.....(1069)

Two leeches; Fern Hollow, Pittsburgh. May 31, 1899.....(1070)

Birds from Allegheny County, collected by Mr. Atkinson in 1898 and 1899; forty-two species, represented by sixty skins. July 13, 1899. ....(1123)

Odonata collected in Allegheny County, July 15 to August 1, 1899; twenty-three species, represented by 234 specimens. Aug. 1, 1899. ....(1145)

Jumping mouse (Zapus hudsonius Zimm); Wilkinsburg, Pa. Aug. 22, 1899..... ....(1163)

Birds collected in Allegheny County: Shoveller duck (Spatula clypeata L.), Widgeon (Mareca americana Gmel.), Sora rail (Porzana carolina L.), Red-shouldered hawk (Buteo lineatus Gmel.), Cooper's hawk (Accipiter cooperi Bonap.) Aug. 22, 1899.....(1164)

Odonata collected at Conneaut Lake, Pa., Aug. 8, 1899; twenty-six species, represented by one hundred and forty-two specimens. Aug. 25, 1899..... .....(1165)

Butterflies collected in Allegheny County and at Conneaut Lake. Aug. 30, 1899.....(1166)

One hundred insects collected in Allegheny County, August, 1899. Sept. 11, 1899..... .....(1177)

Three crayfish from near Wilkinsburg, Pa. Sept. 18, 1899....(1182)

Hair-worm larva from near Wilkinsburg, Pa. Sept. 18, 1899).(1183)

Hellbender (Cryptobranchus alleghaniensis, Daudin), from the Allegheny River above Aspinwall, Pa. Sept. 25, 1899.....(1198)

Six flints, found on farm of R. G. Atkinson, Penn Twp., near Wilkinsburg, Pa. Sept. 28..... .....(1201)

Collection of bird-eggs and nests, many of them from Allegheny County, Pa., representing one hundred and ninety-seven species. (Former Loan No. 57). Oct. 14, 1899.....(1220)

Crayfish, Squaw Run, Allegheny County. Oct. 18, 1899.....(1226)

Mole-cricket (Gryllotalpa borealis Burm), from Squaw Run, Allegheny County. Oct. 20, 1899.....(1227)

Four botanical specimens from Squaw Run, Allegheny County. Oct. 20, 1899..... .....(1228)

Ribbon snake (Thamnophis saurita L.); Squaw Run, Allegheny County. Oct. 21, 1899..... .....(1233)

Atkinson, D. A., and J. L. Graf, Pittsburgh. Unionidæ from Chartiers Creek, Pa., thirty-six specimens. May 29, 1899.....(1059)

Eighty insects; Chartiers Creek, Pa. May 29, 1899.....(1060)

Three salamanders (Spelerpes longicaudus Green); Chartiers Creek, Pa. May 29, 1899.....(1061)

Five reptiles; Chartiers Creek, Pa. May 29, 1899.....(1062)

Nest and three eggs of Maryland yellow-throat (Geothlypis trichas L.), with egg of cowbird (Molothrus ater Bodd.) from Chartiers Creek, Pa. May 29, 1899.....(1063)

Snapping turtle (Chelydra serpentina L.) with eggs, and garter snake (Thamnophis sirtalis L.), from Neville Island, Pa. July 5, 1899. ....(1104)

Crayfish (Cambarus dubius Fax.), two ad. and eight juv., from Stowe Twp., Allegheny County. Oct. 12, 1899.....(1215)

Land-shells, thirty specimens, collected near Duquesne, Pa. Nov. 23, 1899..... ....(1279)

Atkinson, D. A., J. L. Graf, and E. B. Williamson, Pittsburgh, Pa., eighty insects from Moon Twp., Allegheny County. April 24, 1899..(920)

Forty fishes, from Moon Twp., Allegheny County. April 24, 1899 ....(921)

Eleven amphibians, from Moon Twp., Allegheny County. April 24, 1899..... ....(922)

Five snakes (Thamnophis sirtalis L., Bascanion constrictor L.), from Moon Twp., Allegheny County, Pa. April 24, 1899.....(923)

Two cowbirds (Molothrus ater Bodd.), from Moon Twp., Allegheny County. April 24, 1899.....(924)

Seven crayfish (Cambarus bartonii Fabr. and C. dubius Fax.) May 8, 1899..... ....(960)

Thirty-one insects, collected near Boston, Pa. May 8, 1899..(961)

Myriapod, collected near Boston, Pa. May 8, 1899.....(962)

Fourteen shells, collected near Boston, Pa. May 8, 1899.....(963)

Sixty-seven salamanders, from near Boston, Pa. May 8, 1899..(964)

White-footed mouse (Peromyscus leucopus Raf.), collected near Boston, Pa. May 8, 1899.....(965)

Thirty-four insects, collected in Stowe and Neville Twps., Allegheny County. May 15, 1899.....(984)

Fourteen crayfish (Cambarus diogenes Gir. and C. propinquus Gir.); Stowe and Neville Twps., Allegheny County. May 15, 1899..(985)

Thirty-eight Batrachia, collected in Stowe and Neville Twps., Allegheny County. May 15, 1899.....(986)

Turtle (Chrysemys marginata Ag.), young; Stowe Twp., Allegheny County. May 15, 1899.....(987)

Catbird (Galeoscoptes carolinensis L.); Neville Twp., Allegheny County. May 15, 1899.....(988)

Skull of Say's bat (Myotis subulatus Say); Neville Twp., Allegheny County. May 15, 1899.....(989)

Mollusca, twenty-six specimens; Little Pine Creek, Allegheny County. May 22, 1899.....(1025)

Myriapod, from Little Pine Creek, Allegheny County. May 22, 1899..... ....(1026)

Two hundred and seventy-four insects, from Little Pine Creek, Allegheny County. May 22, 1899.....(1027)

Fifty amphibians, from Little Pine Creek, Allegheny County. May 22, 1899..... ....(1028)

Five watersnakes (Natrix leberis L. and Tropidonotus sipedon L.), from Little Pine Creek, Allegheny County. May 22, 1899....(1029)

Nests and eggs of five species of birds, adult screech-owl and three young, from Little Pine Creek, Allegheny County. May 22, 1899. ....(1030)

Atkinson, D.A., and E. B. Williamson, Pittsburgh, Pa., nine insects from Bruce's ice-pond, Pittsburgh. May 9, 1899.....(975)

Fourteen crayfish (Cambarus diogenes Gir.); Bruce's ice-pond, Pittsburgh. May 9, 1899.....(976)

Watersnake (Tropidonotus sipedon L.); Bruce's ice-pond, Pittsburgh. May 9, 1899..... .....(977)

Four sets eggs (five each) of Crow blackbird (Quiscalus quiscula æneus Ridgw.), and one set (four eggs) of Red-winged blackbird (Agelaius phœniceus L.); Bruce's ice-pond, Pittsburgh. May 9, 1899..... ....(978)

Atkinson, D. A., E. B. Williamson, and W. E. C. Todd, Pittsburgh, Pa., Two crayfish (Cambarus proqinquus Gir.); Raccoon Creek, Beaver County, Pa. May 26, 1899.....(1046)

One hundred and nine insects. May 26, 1899.....(1047)

Two salamanders. May 26, 1899.....(1048)

Six reptiles, representing three species. May 26, 1899.....(1049)

Eight sets of birds' eggs, representing five species. May 26, 1899. ....(1050)

White-footed mouse (Peromyscus leucopus Raf.). (One female and 5 young.) May 26, 1899.....(1051)

Atwood, Henry D., Pittsburgh, Pa. Keyboard of organ built in 1745, used by Handel at Covent Garden Theatre, London. May 10, 1899..(979)

Aschman, F. T. Prof., Pittsburgh. Herbarium specimens, principally Ranunculaceæ. Jan. 26, 1900.....(1327)

Bacon, Samuel E., Erie, Pa. Brünnich's murre (Uria lomvia L.), Hudsonian curlew (Numenius hudsonicus Lath.), Pileated woodpecker Ceophlœus pileatus), screech owl (Megascops asio L.), and Long-eared owl (Asio wilsonianus Less.), from Erie County, Pa. Purchased.....(1088, 1284, 1313)

Collection of birds, fifty-four species, represented by sixty-five specimens, mostly from Erie County, Pa. Purchased. Jan. 9, 1900.(1315)

Baldwin, D.D ., Haiku, Maui, Sandwich Islands. Shells, mostly Achatinellæ, from the Hawaiian Islands. Purchased. May 15, 1899....(990)

Barnett, Rev. J. M., Markleton, Pa. Fossils from near Markleton, Pa. April 13, 1899.....(908)

Bartlett, B. F., Pittsburgh. Model of gold nugget found on Anvil Creek, Nome District. Alaska, Sept. 12, 1899; weight, 27⅛ ounces. Jan. 27, 1900.....(1328)

Bennett, Dr. F. G., Mahaffey, Pa. Concretion; vicinity of Mahaffey, Pa. Aug. 19, 1899.....(1155)

Albino white squirrel, from vicinity of Mahaffey, Pa. Jan. 23, 1900. .....(1322)

Bentley, W. A., Nashville, Vt. Micro-photographs of snowflakes. Purchased. May 1, 1899.....(935)

Bergerstock, H. L., Allegheny, Pa. Fossil fruit (Trigonocarpus daviesii Lloyd & Hutton); Kittanning, Pa. Nov. 5, 1899.....(1252)

Boepple Button Co., Muscatine, Ia. Exhibit showing the manufacture of pearl-buttons from the mussel-shell to the finished product. May 26, 1899.....(1053)

Boggs, Anderson C., Shousetown, Pa. Pine-tree lizard (Sceloporus undulatus Weig.), from Moon Twp., Allegheny County, Pa. May 1, 1899.....(942)

Snapping turtle (Chelydra serpentina L.), from Moon Twp., Allegheny County, Pa. July 3, 1899.....(1101)

Red-tailed hawk (Buteo borealis Gmel.), alive; caught in Moon Twp. May 20, 1899.....(1024)

Red newt (Diemyctylus viridescens Raf.), from Moon Twp., Allegheny County, Pa. May 31, 1899.....(1075)

Botanical Society of Western Pennsylvania. The Herbarium of the Society, approximating 20,000 specimens. Nov. 15, 1899.....(1268)

Bowles Antique Shop, Pittsburgh. Arabian flint-lock gun. (Used in camel group.) Purchased. Oct. 5, 1899.....(1210)

Brocket, A. H., Pittsburgh. Chinquapins, as sold in the Baltimore markets. Oct. 14, 1899.....(1221)

Brockett, H. B., Jr., Ligonier, Pa. Gray squirrel, in flesh. (Skin made.) Oct. 20, 1899.....(1229)

Brogan, Edward, Allegheny, Pa. Three lepidodendrons, from Knox quarry, Beaver River, Pa. July 7, 1899.....(1108)

Brown, Isaac, Harrisburg, Pa. Map of Pennsylvania. Sept. 18, 1899. .....(1184)

Brown, T. N., Uniontown, Pa. Two oil paintings of Lepidoptera—Citheronia regalis and Pyrameis huntera. April 5, 1899 .....(900)

Brown, W. H., Salisbury, Rhodesia, South Africa. Bullet which killed the lioness shot by W. H. Brown and now in the Carnegie Museum. April 10, 1899.....(905)

Brownlee, Arch M., Washington, Pa. Weasel, in flesh. Dec. 4, 1899. .....(1292)

Burgwin, Pierce Butler Carlisle, Pittsburgh. Indian stone axe. Nov. 13, 1899.....(1263)

Burtner, G. A., Freeport, Pa. Herbarium specimens of four species of ferns. Nov. 13, 1899.....(1264)

Burnett, L. E., Little Medicine, Wyoming. Muskrat, skeleton of antelope, coyote skin, skeleton of coyote, three red squirrels, skull of grizzly bear, two ptarmigans. Purchased. Feb. 9, 1900.....(1338)

Butterfield, Henry, Pittsburgh. Piano which formerly belonged to and was used by Stephen C. Foster. Foster was a native of Pittsburgh, born 1826; died 1864; most popular of American ballad-writers; composer of "Old Folks at Home." Dec. 20, 1899.....(1304)

Carnegie, Andrew. Upper end of femur of large dinosaur, collected by Dr. W. J. Holland in Carbon County, Wyoming, April, 1899. May 18, 1899.....(1004)

Model of the original telegraphic recording receiver. Dec. 20, 1899. .....(1305)

Vertebrate fossils, collected by Dr. J. L. Wortman and party in Albany and Carbon Counties, Wyoming, during the summer of 1899. Oct. 27, 1899.....(1246)

Invertebrate fossils, collected in Albany County, Wyoming, by Dr. J. L. Wortman and party during the summer of 1899. Oct. 27, 1899. .....(1247)

Carnegie, Mrs. Lucy, Dungeness, Ga. Siren, in alcohol; captured in Wash Pond, near Fort Myers, Fla., May, 1898, by Thos. Hartigan. Aug. 22, 1899.....(1160)

Tarpon (mounted), caught by Mrs. Carnegie, near Boca Grande, on Gulf coast of Florida. Sept. 21, 1899.....(1194)

Carnegie Steel Co., Ltd., Pittsburgh. Collection of iron and manganese ores; sixty specimens. Jan. 31, 1900.....(1334)

CARNEGIE MUSEUM STAFF.

Banks, Wilson. Models constructed in the Museum Laboratories: Conestoga wagon, stage coach, one-horse chaise; constructed after models loaned by the U. S. National Museum. Nov. 27, 1899....(1280)

Sheep-herders wagon; made after photograph taken in Wyoming by Dr. Holland. March 26, 1900.....(1362)

Dray; made from illustration in Pittsburgh Bulletin, Dec. 11, 1899. March 26, 1900.....(1363)

The Murdock engine; made from a sketch of engine in Field Columbian Museum. March 26, 1900.....(1364)

The "John Bull" engine, with tender and two cars; constructed after model loaned by the U. S. National Museum. March 31, 1900..(1374)

Carpenter, W. J., Pittsburgh. Original drawings of limbs and vertebræ of dinosaurs. March 29, 1900.....(1371)

Holland, Dr. W. J. Four beetles; Carbon County, Wyoming. Collected. May 6, 1899.....(951)

Birds collected in Carbon County, Wyoming—four species, represented by seven specimens. Collected. May 6, 1899.....(952)

Jack rabbit (Lepus campestris Bach.), and weathered buffalo skull; Carbon County, Wyoming. Collected. May 6, 1899.....(954)

Holland, Dr. W. J. and Party. (Rocky Mountain Expedition, 1899.) Plants collected in Wyoming, July and August; one hundred and fourteen species, represented by two hundred and fifty herbarium specimens. Sept. 18, 1899.....(1185)

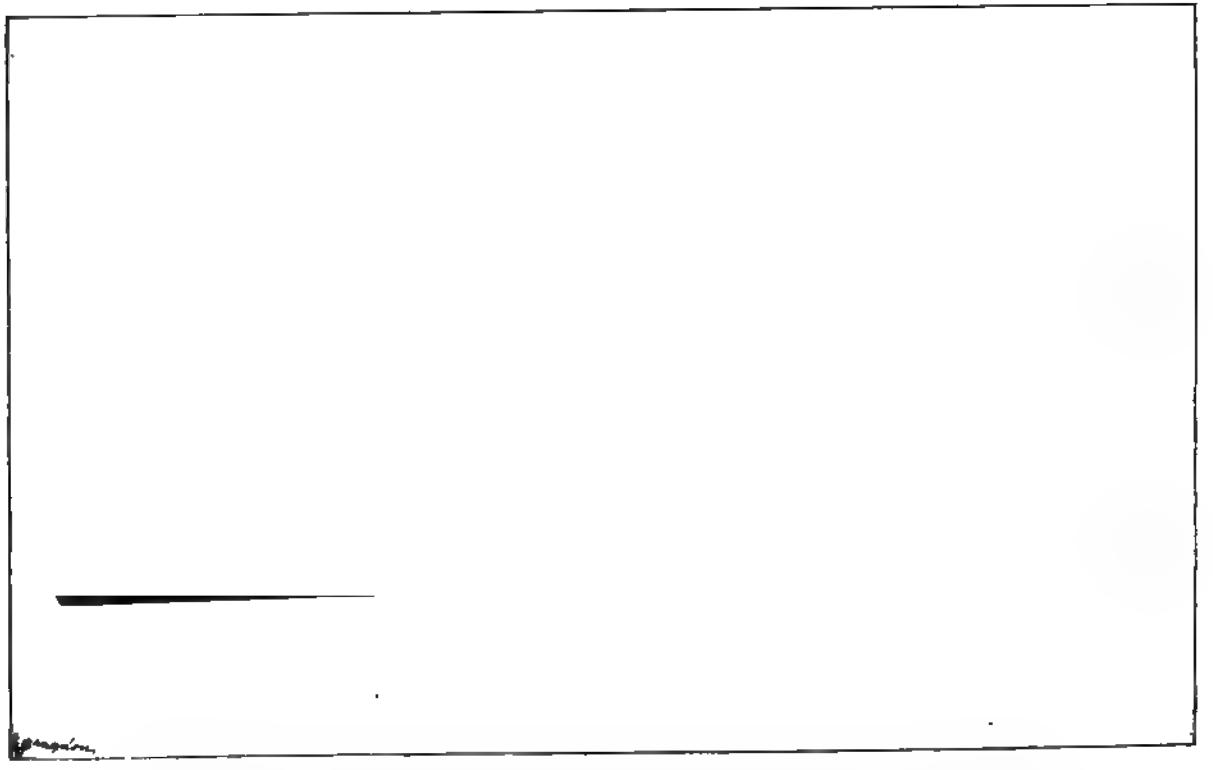
Six geological specimens collected in Wyoming, July and August. Sept. 18, 1899.....(1186)

Mammals collected in Wyoming, July and August; 8 species, represented by twenty-three specimens. Sept. 18, 1899.....(1187)

Birds collected in Wyoming, July and August; twenty-four species, represented by fifty specimens. Sept. 18, 1899.....(1188)

Fishes collected in Wyoming, July and August; twenty specimens. Sept. 18, 1899.....(1189)

Reptiles and batrachians collected in Wyoming, July and August; thirty-two specimens. Sept. 18, 1899.....(1190)



MODEL OF CONESTOGA WAGON.
(Made by Wilson Banks and T. A. Mills. Photographed by A. S. Coggeshall and J. A. Shafer.)

PAPAGO SQUAW.

The figure illustrates the primitive method of grinding grain by means of the "matate," or mealing-stone.
(Modeled by T. A. Mills. Photographed by A. S. Coggeshall and J. A. Shafer.)

Crustaceans collected in Wyoming, July and August; thirteen specimens. Sept. 18, 1899.....(1191)

Insects collected in Wyoming, July and August. Sept. 18, 1899. .....(1192)

Link, G. A. Twelve insects collected in the museum laboratories. May 3, 1899.....(946)

Three scorpions found in material shipped from Florida. May 19, 1899.....(946)

Mills, Theodore A. Figures modeled in the Museum laboratories: Zuni driller, showing the aboriginal method of perforating quartz and other hard rocks. Installed Nov. 2, 1899.....(1296)

Group of two Yuma Indians, showing method of making arrows. (The flints and other stone implements taken from various collections.) Installed Nov. 2, 1899.....(1297)

Papago squaw, showing the primitive method of grinding grain with the "matate." (Matate donated by K. F. Miller; vessels of pottery from the Morris coll.) Installed Nov. 2, 1899.....(1298)

Chippewa medicine-man, attired in costume from the Waugh and Richards collections. Installed Nov. 2, 1899.....(1299)

Chippewa in birch-bark canoe. (Canoe donated by Messrs. Buffington.) Installed Nov. 2, 1899.....(1300)

Eskimo, with hunting and fishing equipment, in kyak. (Kyak, etc., donated by Messrs Magee; jacket donated by Mr. Webster.) Installed Nov. 9, 1899.....(1301)

Group of African man and boy, showing the primitive method of making fire by the friction of a rapidly revolving stick. Installed Nov. 2, 1899.....(1302)

Australian bushman, throwing boomerang. (Boomerang from W. P. Hanna coll.) Installed Nov. 2, 1899.....(1303)

Thirteen insects collected in the Museum laboratories....(909, 1032)

Shafer, John A. Native plant exhibit, consisting of fresh specimens of indigenous plants constantly on exhibition from April to November, 1899. About four hundred species were represented by frequent collections.

Three hundred and fifty herbarium specimens of Allegheny County plants, collected in 1899. March 31, 1900.....(1376)

Seeds of thirty-five species, collected in 1899. March 31, 1900. (1377)

Todd, W. E. Clyde. Twenty-one small birds, representing seventeen species; from Beaver, Pa. April 29, 1899.....(929)

Three mammals (three species). April 29, 1899.....(930)

Eight insects found in nest of kingfisher; Raccoon Creek, Pa. May 11, 1899.....(980)

Fifty-two bird skins, representing thirty-six species; Beaver County, Pa. May 31, 1899.....(1071)

Nests and eggs of four species of birds, Beaver County, Pa. May 31, 1899.....(1072)

Nest and four eggs of least fly-catcher (Epidonax minimus Baird); Beaver, Pa. June 2, 1899.....(1078)

Mammals collected in Western Pennsylvania in June and July; nine species, represented by fifteen specimens. July 21, 1899.....(1126)

Birds collected in Western Pennsylvania, June and July; fifty-seven species, represented by one hundred and thirty-nine specimens. July 21, 1899.....(1127)

Bird-nests and eggs collected in Western Pennsylvania, June, 1899; four species. July 21, 1899.....(1128)

American goldfinch (Astragalinus tristis L.), nest and six eggs; Beaver County, Pa. July 23, 1899.....(1142)

Bats collected at Beaver, Pa., during the summer of 1899; three species, represented by ten specimens. Sept. 30, 1899.....(1207)

Birds taken in Beaver County, Pa., August and September; thirty-five species, represented by fifty-eight specimens. Sept. 30, 1899. .....(1208)

Birds from Beaver County, Pa., collected in October; seven species, represented by twelve specimens. Oct. 25, 1899.....(1245)

Birds collected in Beaver County, Pa., in November; six species, represented by nine specimens. Nov. 27, 1899.....(1281)

Bats from cave near Hillsdale, Westmoreland County, Pa.; three species, represented by thirty-five specimens. Feb. 26, 1900..(1348)

Webster, F. S. Material collected in Florida during April and May, 1899:

Botanical material consisting of fifty specimens of plants and five species of seeds.....(1009)

Gorgonias, twenty-two large specimens, five varieties.....(1014)

Corals, ten specimens.....(1016)

Starfish, six specimens.....(1015)

Insects and arachnids, one hundred and fifteen specimens.(1019, 1137)

Crustaceans, twenty-five specimens, probably eight species. .....(1017, 1138)

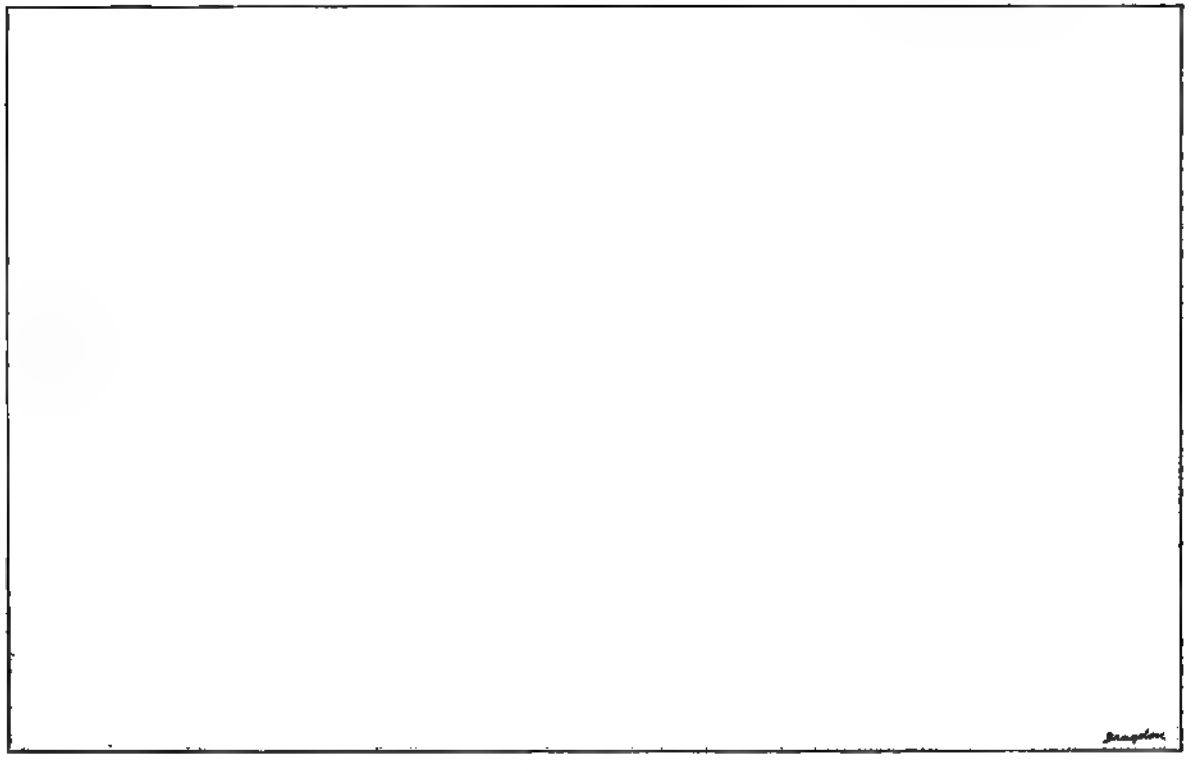
Mollusca, several thousand specimens.....(1011, 1140)

Fishes, about forty specimens, representing five species.(1018, 1136)

Reptiles, skins, skeletons, and eggs of several species; a number alive.....(1010, 1135)

Birds, one hundred skins, representing thirty-seven species. .....(1012, 1134)

Bird-nests and eggs of nine species, represented by seventeen nests and 68 eggs.....(1139)



BARN-OWL AND YOUNG.
(Mounted by F. S. Webster. Photographed by A. S. Coggeshall and J. A. Shafer.)

Mammals, thirty-five specimens, representing five species. (1013, 1133)
Groups prepared in the Museum Laboratories: The "Count Noble" group, a setter dog flushing a covey of quails (Colinus virginianus L.) Installed Nov. 2, 1899.
Cherrybirds (Ampelis cedrorum Vieill.) in branch of cherry tree. Installed Nov. 2, 1899.
American Robin (Merula migratoria L.) in branch of blossoming apple tree. Installed Nov. 2, 1899.
Baltimore oriole (Icterus galbula L.) in branch of elm tree. Installed Nov. 2, 1899.
Golden-winged warbler (Helminthophila chrysoptera L.) with nest in clump of weeds. Installed Nov. 2, 1899.
Chestnut-sided warbler (Dendroica pensylvanica L.) with nest in blackberry-bush. Installed Nov. 2, 1899.

Webster, F. S. and J. A. Shafer. Snake (Coluber obsoletus alleghaniensis Holb.); Moon Twp., Pa. Collected. Aug. 5, 1899.....(1147)

Williamson, E. B. Fresh-water shrimps (Gammarus), twenty-five specimens from Schenley Park. Collected. April 5, 1899.....(899)
Fourteen Diptera; four Hymenoptera; twenty-nine Coleoptera; twelve Lepidoptera; eighteen Odonata. From Stowe and Neville Twps., Pa. Collected. May 3, 1899.....(957)

Williamson, E. B. and J. A. Shafer. Batrachians and reptiles from Stowe and Neville Twps.; six specimens, representing four species. Collected. May 3, 1899.....(955)
Mollusca from Stowe and Neville Twps.; 141 specimens, representing four species. Collected. May 3, 1899.....(956)
Crustaceans from Stowe and Neville Twps.; fourteen specimens. Collected. May 3, 1899.....(958)

Chambers, William, New Kensington, Pa. Branch of Ash tree showing abnormal growth. June 20, 1899.....(1094)

Charters, William, Pittsburgh. Milk-snake (Ophibolus doliatus triangulus Boie.), from Blue-Ridge Mountains, near Johnstown, Pa. June 26, 1899.....(1099)

Clark, A. W., Beaver, Pa. Canada goose (Branta canadensis L.); Greater scaup duck (Aythya marila nearctica Stejn.); two Buffle-head ducks Charitonetta albeola L.); Pied-billed grebe (Podilymbus podiceps L.); from the Ohio River, near Beaver, Pa. Purchased. April 29, 1899.....(928)

Clarke, Louis S., Pittsburgh. Twenty-six Indian stone implements from Western Pennsylvania. April 14, 1899.....(910)
Spanish-American War relics: Six-pound shell from the "Almirante Oquendo" and hexagonal grains of black powder for same; one-

pound shell from the "Viscaya" and charge of powder for same; grape-shot found under the walls of Morro at San Juan, Porto Rico, supposed to have been fired during one of the English sieges; field-gun cartridge case, used by the Spanish at El Caney; exploded one-pound shell from the "Viscaya"; Spanish projectile from Santiago de Cuba; fragment of mainmast of "Reina Mercedes," shattered by thirteen-inch shell from U. S. fleet; fragment of "switch-board" from "Reina Mercedes"; fragment of "Reina Mercedes"; iron cabin ornament from "Reina Mercedes"; fragment of "Surrender Tree," Santiago de Cuba; stanchion from bridge-rail of "Maria Teresa"; shell and fragment of shell found under the walls of Morro Castle, Santiago, after the bombardment by Sampson's fleet.....(911, 1096)

Clapp, George H., Pittsburgh. Two fungus-gnats (Mycetophilus) and three larval cases, from Kingston, Jamaica. April 7, 1899....(903)
Three Coleoptera. Edgeworth, Pa. May 8, 1899.....(966)
Ten insects. Edgeworth, Pa. May 16, 1899.....(997)
Carboniferous fossils from Stoop's Ferry; lot of shells, crinoids, corals. May 17, 1899.....(1002)
Moth (Catocala nubilus), Edgeworth, Pa. May 24, 1899.....(1042)
Forty insects collected in Tennessee and Massachusetts. Sept. 11, 1899..... ....(1178)

Clow, Mrs. W. S., Pittsburgh. Two specimens of sponge, Palm Beach, Florida. Nov. 9, 1899.....(1256)

Collingwood, William, Swissvale, Pa. Two lithographs of monitor "Manayunk"; lithograph of the steamboat "Washington," built in 1820, at Cincinnati, by General Paul Anderson and others.....(1092, 1174)

Cummings, S. B., Pittsburgh. English bulldog in the flesh. (Made into skin and skeleton.) Jan. 27, 1900.....(1330)

Commons, Albert, Wilmington, Del. Herbarium containing thirteen thousand specimens. Purchased. Nov. 22, 1899.....(1278)

Conrad, G. B., Pittsburgh. Thirty diptera. May 4, 1889.....(949)

Cordell, A. M., Pittsburgh. Young mouse (Mus musculus L.) April 29, 1899..... ....(933)

Cowan, James B., Greensburg, Pa. Copy of commission of Capt. Wm. Cowan, date 1775. May 2, 1899.....(943)

Cowan, John L., Cowansville, Armstrong County, Pa. Two Carboniferous fossils (Pecopteris.) April 24, 1899.....(918)
Concretion containing pyrites; Armstrong County, Pa. Aug. 9, 1899..... ....(1149)

Craig, A. G., Pittsburgh. Fossils from shale near Cumberland, Md. ....(1262, 1157)

Craig, Edward S., Pittsburgh. Archæological material from the collection of the late Isaac Craig. July 8, 1899.....(1118)

War relics and old fire-arms from the collection of the late Isaac Craig. July 10, 1899.....(1119)

Fossils and concretions from the collection of the late Isaac Craig. July 10, 1899.....(1120)

Crawford, S. M., Shannopin, Pa. Branch of the yellow oak (Quercus acuminata Mx.) Sept. 25, 1899.....(1200)

"One hundred foot" oil-sand from the Marks well, near Shannopin, Beaver County, Pa. Oct. 24, 1899.....(1241)

Cunningham, Charles R., Pittsburgh. Twig of paper-birch (Betula papyrifera Marshall); from Connecticut. Sept. 25, 1899.....(1199)

Dalley, Benjamin, Carnot, Pa. Three snakes (Thamnophis sirtalis L.); from Moon Twp., Pa. Aug. 19, 1899.....(1158)

Dalley. Charles, Jr., Carnot, Pa. Two copperhead snakes (Agkistrodon contortrix S.); Moon Twp., Pa. Aug. 10, 1899.....(1151)

Dashiell, Grayson F., Pittsburgh. Fossil, lepidodendron; Beaver County, Pa. May 20, 1899.....(1021)

Davison, Fred F., Shousetown, Pa. Shed skin of blacksnake; Moon Twp., Pa. Nov. 3, 1899.....(1251)

Dewey (The) Reception Committee, Washington, D. C. Bronze medal made from metal captured at Manila and struck in honor of Admiral Dewey's return to Washington, Oct. 2, 1899. Nov. 17, 1899..(1271)

Dole, William, Pittsburgh. Snake (Diadophis punctatus L.), from Phipps Conservatory. Sept. 15, 1899.....(1179)

Dravo, Hudson Downes, Pittsburgh. Mushroom-coral. Nov. 1, 1899. .....(1248)

Duncan, James G., Wick, Scotland. Two copper cents, one stamped "Washington and Independence. 1783"; the other "Liberty. 1796." July 5, 1899.....(1107)

Ebert, William T., Pittsburgh. Brewer's mole (Parascalops breweri Bach.); four young specimens. May 6, 1899.....(959)

Ferguson, John, Allegheny, Pa. Seeds of sixty-eight species of plants. .....(1204, 1212)

Ford, Hon. H. P., Pittsburgh. Copper ore from Virginia; three large specimens. Feb. 10, 1900.....(1339)

Forse, J. C., Pittsburgh. Pileated woodpecker (Ceophlœus pileatus L.) Dec. 1, 1899.....(1288)

Fowler, W. N., Foxburg, Pa. Copperhead snake (Agkistrodon contortrix L.), alive. July 29, 1899.....(1143)

Garret, H., Pittsburgh. One large U. S. copper cent; one helfpenny, English, George III., 1775. April 24, 1899.....(917)

Gaston, L. D., Canoe Ridge, Pa. Fungus attached to oak; Canoe Twp., Indiana Co., Pa. March 23, 1900.....(1360)

Gearing, W. C., Pittsburgh. Piece of bronze from Braddock's battlefield. April 5, 1899.....(901)

Giammarco, Francesco, Pittsburgh. Two Italian coins. May 29, 1899. .....(1066)

Gordon, G. W. and A. O. Medsger, Scottdale, Pa. Ten garter snakes from Westmoreland County, Pa. Nov. 14, 1899.....(1265)

Graf, J. L., Pittsburgh. Lycopodium complanatum L. and L. lucidulum L., collected on Squaw Run, Ross Twp., Allegheny County, Pa. .....(1318, 1366)

Graf, J. L. and B., Pittsburgh. Two crayfish (Cambarus diogenes Gir.); from Squaw Run, Pa. May 1, 1899.....(938)

Batrachians from Squaw Run, four species represented by seven specimens. May 1, 1899.....(939)

Two field mice (Microtus pennsylvanicus Ord.); from near Aspinwall, Pa. May 1, 1899.....(940)

Set of five eggs of song sparrow (Melospiza fasciata Gmel.); from Squaw Run, Pa. May 1, 1899.....(941)

Gutberlet, Martin, Pittsburgh. Corn-cob in form of hand. March 22, 1900.....(1370)

Griffin, Herman, Pittsburgh. Maskalonge (Esox nobilior); Conneaut Lake, Pa. Sept. 30, 1899.....(1206)

Groscost, M. C. and J. W. Atkins, Beaver, Pa. Red-tailed hawk (Buteo borealis Gmel.); Great horned owl (Bubo virginianus Gmel.); from near Beaver, Pa. April 29, 1899.....(927)

Gross, E. F., Edgewood Park, Pa. Collection of minerals and gems. May 16, 1899.....(998)

Hamilton, Dr. Wm. R., Pittsburgh. Herbarium specimens of nine species of plants from Sparrow Lake, Canada, and seeds of the paw-paw from the West Indies. Oct. 12, 1899.....(1214)

Herbarium specimens from Arkansas and Texas. Cones and seed of the Italian pine.....(1267, 1337)

Hatcher, J. B., Pittsburgh. Echinoderm from chalk-cliffs near Dover, England. March 10, 1900.....(1351)

Four geodes, from Bad Lands, White River beds, Shannon County., S. Dak. March 10, 1900.....(1352)

Three stone "bolas" made and used by the Tehuelche Indians of Southern Patagonia. March 10, 1900.....(1353)

(Camptosorus rhizophyllus L.); from Delaware Water-Gap, Pa. March 27, 1900.....(1365)

Heilbron, S., Pittsburgh. Ear of corn grown from seed said to have come from the Klondike. Oct. 14, 1899.....(1216)

Hine, J. S., Columbus, O. Chrysops, three species (C. callidus, C. indus, C. fulvaster). July 3, 1899.....(1102)

Holland, W. J. Pittsburgh. Porphyry from Sherman, Wyoming, the highest point on the Union Pacific R. R. Nov. 5, 1899.....(1254)

Hollis, Thos. H., Pittsburgh. Hellbender caught in Monongahela River. July 18, 1899.....(1125)

Hough, Mrs. Walter, Washington, D. C. Seventy-eight Arizona plants, collected near Holbrook, Arizona. Jan. 26, 1900.....(1326)

Hudson, Col. Thos. J., Executor Jos. Eichbaum's Estate, Pittsburgh. Original papers of Society for the Relief of Disabled Firemen of Pittsburgh and Allegheny, adopted May 21, 1838. Sept. 28, 1899..(1203)

Hughlett, C. L., Rockledge, Fla. Ivory-billed woodpecker (Campephilus principalis L.) Purchased. Feb. 27, 1900.....(1350)

Hunt, Capt. Alfred E., through Mrs. A. E. Hunt. Executrix, Pittsburgh. Duplicate roll of the officers and men of Battery B, Pennsylvania Volunteers, Spanish-American War. Dec, 28, 1899.....(1308)

Hunter, Joseph H., Pittsburgh. Envelope of a letter forwarded per steamer "Oregon," which left Queenstown, Ireland, March 7, 1886, and was sunk off Fire Island, March 14, 1886, the mail recovered from the wreck July 1-4, 1886. April 24, 1899.....(919)

Humphries, Edward C. R., Pittsburgh. Three election-tickets, campaign of 1860; from Virginia. Dec. 8, 1899.....(1295)

Hutchins, James, Visalia, Tulare County, California. Tarantula nest. July 5, 1899.....(1105)

Jenks, Ira C., Santa Rosa, Cal. Purple Gallinule (Ionornis martinica L.); from Washington County, Pa. Aug. 22, 1899.....(1162)

Johnson, J. R., Clarksville, Tenn. Indian suit (beaded buckskin, two pieces). Purchased. May 2, 1899.....(944)

Kelly, Francis, Pittsburgh. Fox squirrel. (Skin made.) Nov. 29, 1899. .....(1287)

Kinney, R. H., Gold, Pa. Four white rabbits (Lepus americanus virginianus); from Gold, Potter County, Pa. Two black squirrels (Sciurus carolinensis leucotis); from Gold, Potter County, Pa. Purchased. .....(1331, 1347)

Knipe, Rev. S. W., Oceanic, N. J. Pennsylvania and New Jersey plants, eighteen species, represented by twenty herbarium specimens. Feb. 24, 1900.....(1341)

Kœnig, Dr. Adolph, Pittsburgh. Turtle (Cistudo carolina L.); from O'Hara Twp., Allegheny County. Aug. 30, 1899.....(1167)

Pond turtle (Chrysemys marginata Ag.); vicinity of Darlington, Pa. Sept. 25, 1899.....(1197)

Herbarium specimens of twenty-nine species of plants collected on islands of Georgian Bay, Canada, 1899. Jan. 10, 1900.....(1316)

Krauth, Mrs. C. P., Pittsburgh. Mineralogical collection containing two hundred and seventy-five specimens, mostly foreign, the property of her late husband. Jan. 24, 1900.....(1324)

Kyle, Miss Fanny C., Pasadena, Cal. Six Corals; five fossils from various localities; seven minerals.....(1080, 1081, 1082)

Lakin, Robert, Peale, Clearfield County, Pa. Sigillaria from Clearfield County. Purchased. Feb. 2, 1900.....(1336)

Lawton, Charles, Pittsburgh. Snake (Thamnophis sirtalis L.); Johnstown, Pa. Sept. 28, 1899.....(1202)

Lehman, G. M., Pittsburgh. Twelve photographs of Navassa Island. Nov. 17, 1899.....(1269)

Leslie, Max G., Pittsburgh. Sixteen cancelled bonds, City of Pittsburgh. April 21, 1899.....(916)

Lippert, George, Pittsburgh. Big brown bat (Vespertilio fuscus). Dec. 29, 1899.....(1310)

Link, G. A., Pittsburgh. Three beetles. May 25, 1899.....(1045)

Skeleton of European siskin. Prepared by Mr. Link. June 15, 1899.....(1089)

Allegheny blacksnake (Coluber obsoletus alleghaniensis Holb.), half-grown; from Moon Twp., Pa. July 29, 1899.....(1144)

Three parrots—Cuban, Maracaibo, and Red-fronted Mexican. Sept. 7, 1899.....(1176)

Seeds of Berberis sp. Oct. 18, 1899.....(1224)

Loubat, Mons. le Duc de, Paris, France. Three volumes: Codex Telleriano-Remensis, Manuscrit Mexicain a la Bibliotheque Nationale, reproduit en photochromographie aux frais du Duc de Loubat et precede d'une Introduction contenant la transcription complete des anciens commentaires Hispano-Mexicains per le Dr. E. T. Hamy. Paris, 1899.

Descriptions del Codice Cospiano, Manuscrito pictorico de los Antiguos Nauas que se conserva en la Bibliotica de la Universidad de Bolonia. Reproducido en Fotocromografia a expensas de S. E. el Duque de Loubat. Rome, 1898.

Manoscritto Messicano Borgiano del Museo Ethnografico della S. Congregazione di Propaganda Fide. Riproditto in fotochromografica a spense di S. E. el Duca di Loubat a cura della Bibliotica Vaticana. Rome, 1898. Dec. 29, 1899.....(1309)

Lucock, F. A., Comfort, Kendall County, Texas. Seven fossil echinoderms. Jan. 30, 1900.....(1333)

Luscombe, C. R., Washington, D. C. Model illustrating methods of moving heavy bodies by means of rollers.

Model illustrating the rolling load.

Model illustrating the transportation of tobacco hogsheads by the "rolling load" method.

Model of an early Ohio River steamboat, showing application of the stern-wheel method of propelling.

Model of steamer "New Orleans," built by Roosevelt and Livingston in 1812, at Pittsburgh, and used on the Ohio River. This was the first boat propelled by steam on that stream.

Model of "flatboat," as used on the Ohio River about the year 1800.
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McPherson, John, Bonar-Bridge, Scotland. Mantrap found in basement of Skibo Castle, Scotland. March 22, 1900.....(1357)

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Maxwell, Miss S. D., Pittsburgh. Honey-creeper from South America. Feb. 27, 1900.....(1349)

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Medsger, O. P., Ruffsdale, Pa. Seeds of Verbascum blattaria L., and of Vagnera racemosa L. May 8, 1899.....(969)
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(From photograph by A. S. Coggeshall.)

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Reed, J. R., Pittsburgh. Section of tree from the Kelly farm, battlefield of Chickamauga, containing several grapeshot, fragments of shell, etc. Nov. 9, 1899.....(1261)

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Reed, W. C., Laramie, Wyoming. Set of seven eggs of the sage-grouse (Centrocercus urophasianus Bonap.). Oct. 18, 1899.....(1222)

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Richards, T. H., Bunker Hill, Ill. Collection of six Indian objects and photographs. Sept. 5, 1899.....(1171)

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Rogers, Chambers, South Bethlehem, Pa. Two sea-turtle eggs. June 23, 1899.....(1098)

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Ross, Charles C., Pittsburgh. Promissory note given in payment for hire of negro slave, Virginia, 1852. May 20, 1899.....(1020)

Rost, Hugo A., Stoop's Ferry, Pa. Hornet's nest from Moon Twp., Pa. Nov. 5, 1899.....(1250)

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Sahrrhage, Oscar, Pittsburgh. Snake (Coluber obsoletus Say) from which twelve eggs were taken. July 11, 1899.....(1122)

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Schwartz, J. E., Pittsburgh. Thirteen pieces of Indian pottery, stone mortar, and painting on wood; from Mexico. May 6, 1899.....(950)

Framed map of Allegheny "one hundred years ago." May 9, 1899. .....(970)

Seager, Ray, Fair Oaks, Pa. Greater yellow-shanks (Totanus melanoleucus Gmel.); from Fair Oaks. May 16, 1899.....(993)

Shafer, Adolph T., Carnot, Pa. Seven Cricket-frogs (Acris gryllus crepitans Baird); from Moon Twp., Pa. April 13, 1899.....(907)

Shafer, Henry A., Carnot, Pa. Chipmunk (Tamias striatus L.); from Moon Twp., Pa. Oct. 21, 1899.....(1231)

Shafer, Sergt. Hiram A., U. S. A., Philippines. Snake (Coluber obsoletus alleghaniensis Holb,) from which fourteen eggs were taken; Moon Twp., Allegheny County, Pa. July 5, 1899.....(1106)

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Two U. S. copper cents, 1866 and 1886. May 18, 1899.....(1003)

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Ferns collected from 1884 to 1894, principally duplicate material. Dec. 2, 1899.....(1290)

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Shafer, Quercus T., Carnot, Pa. Frogs eggs from Moon Twp. April 13, 1899.....(906)

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Five snakes from Moon Twp., Allegheny County.....(968, 983, 991)

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Three Unios from Dead Man's Island, Allegheny County. Sept. 15, 1899.....(1181)

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Shafer, Theo. A., Jr., Carnot, Pa. Set of four kill-deer eggs; Allegheny County. May 18, 1899.....(1005)

Shellaby, Harry, Pittsburgh. Dragonfly (Epiæschna heros Fabr.); Pittsburgh. May 22, 1899.....(1033)

Shields, W. Dickinson, Shields, Pa. Indian pottery; from Shields, Allegheny County. May 16, 1899.....(999)

Shoeffel, Frank, Conneaut Lake, Pa. Great blue heron (Ardea herodias L.); from Conneaut Lake, Red-shouldered hawk (Buteo lineatus Gmel.) Nov. 27, 1899.....(1283)

Shufeldt, Percy W., Washington, D. C. Birds from Smith's Island, Va.; one hundred and eight specimens, representing thirty-five species. Purchased. June 23, 1899.....(1097)

Bird skins, mainly from Smith's Island, Va., made in May and June, 1899; forty-five species, represented by 110 specimens. Purchased. July 24, 1899.....(1129)

Birds from Smith's Island, Va.; fifteen species, represented by twenty-six skins. Purchased. Oct. 14, 1899.....(1219)

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Smith, Herbert H, Santa Marta, Colombia, S. A. Mammals, skins and skeletons; twelve species, represented by seventeen specimens. Purchased. May 2, 1899.....(945)

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Stephenson, H. A. Crafton, Pa. Lepidodendron in sandstone from Buffalo Creek, Armstrong County, Pa. May 24, 1899.....(1041)

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Salamander (Spelerpes longicaudus Green); Beaver County, Pa. May 16, 1899.....(992)

Melanterite (native sulphate of iron); from Butler County, Pa. Dec. 2, 1899.....(1289)

Collection of birds' eggs, mostly from Western Pennsylvania; forty-seven species, fifty-three sets, containing two hundred and sixteen eggs. Dec. 29, 1899.....(1311)

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Topping, Samuel, Pittsburgh. Garter snake (Thamnophis sirtalis L.) from Squirrel Hill, Pittsburgh. Sept. 25, 1899.....(1196)

Ulrich, G. W., Pittsburgh. Salamander (Gyrinophilus porphyriticus Green) from Fern Hollow, Pittsburgh. April 29, 1899.....(934)

Walker, C. D., Pittsburgh. Suttler's check used during the civil war. April 5, 1899.....(902)

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Williamson, E. B., Pittsburgh. Two garter snakes (Thamnophis sirtalis L.); Aspinwall, Pa. May 1, 1899.....(937)

Wilson, William, Chatham, Ontario, Canada. Camp-kettle said to have been used by George Washington's army at Delaware River. Dec. 20, 1899.....(1306)

Wiseman, J. L., Pittsburgh. Four pieces of canal boat, excavated under Spring Alley, near Eleventh street, Pittsburgh. Jan. 12, 1900. .....(1317)

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Zarobsky, V. J., Wilmerding, Pa. Reptiles and batrachians from Allegheny County; ten species, represented by twenty-four alcoholic specimens. Feb. 24, 1900.....(1346)

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Nest of the trap-door spider. March 20, 1900.....(1356)

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Emu. Skin and skeleton saved. Jan. 29, 1900.....(1332)

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Academy of Science and Art of Pittsburgh. Synopsis of the Genus Sitanion; by Jared G. Smith. June 29, 1899.....(276)

The Structure of the Caryopsis of Grasses, with reference to their Morphology and Classification; by P. Beveridge Kennedy. (Two copies.) July 3, 1899.....(277)

Bulletin of the Geological Institution of the University of Upsala, Vol. IV., Part I., No. 7, 1898. Sept. 30, 1899.....(299)

The Birds of Eastern North America, Part I.; by Charles B. Cory. Oct. 10, 1899.....(305)

List of mammals obtained by Thaddeus Surber, collected for the Field Columbian Museum chiefly in Oklahoma and Indian Territories; by D. G. Elliott. Notes on a collection of Fishes and Amphibians from Muskoka and Gull Lakes; by S. E. Meek. The birds of Eastern North America, Part II.; by Charles B. Cory. Dec. 23, 1899.....(324)

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Mycological Notes, No. 4: The Genus Psalliota; by C. G. Lloyd. Smooth Brome Grass; by P. Beveridge Kennedy. Jan. 25, 1900.(336)

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Baker, Frank C., Chicago, Ill. Notes on a collection of Pleistocene Shells from Milwaukee, Wisconsin; by Frank C. Baker. Jan. 19, 1900.(330)

Bernice Pauahi Bishop Museum, Honolulu, Hawaiian Islands. Memoirs, Vol. I., No. 1; Hawaiian Feather Work; by Wm. T. Brigham. Oct. 30, 1899.....(313)

Blatchley, W. S., Indianapolis, Ind. Twenty-third Annual Report, Department of Geology and Natural Resources, Indiana. Dec. 21, 1899. .....(323)

Boston Museum of Fine Arts, Boston, Mass. Twenty-third Annual Report of the Trustees. April 5, 1899.....(247)

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Catalogue of North American Plants north of Mexico, exclusive of the lower cryptogams; by A. A. Heller. Botanical Explorations in Southern Texas during the season of 1894; by A. A. Heller. Aug. 19, 1899.....(286)

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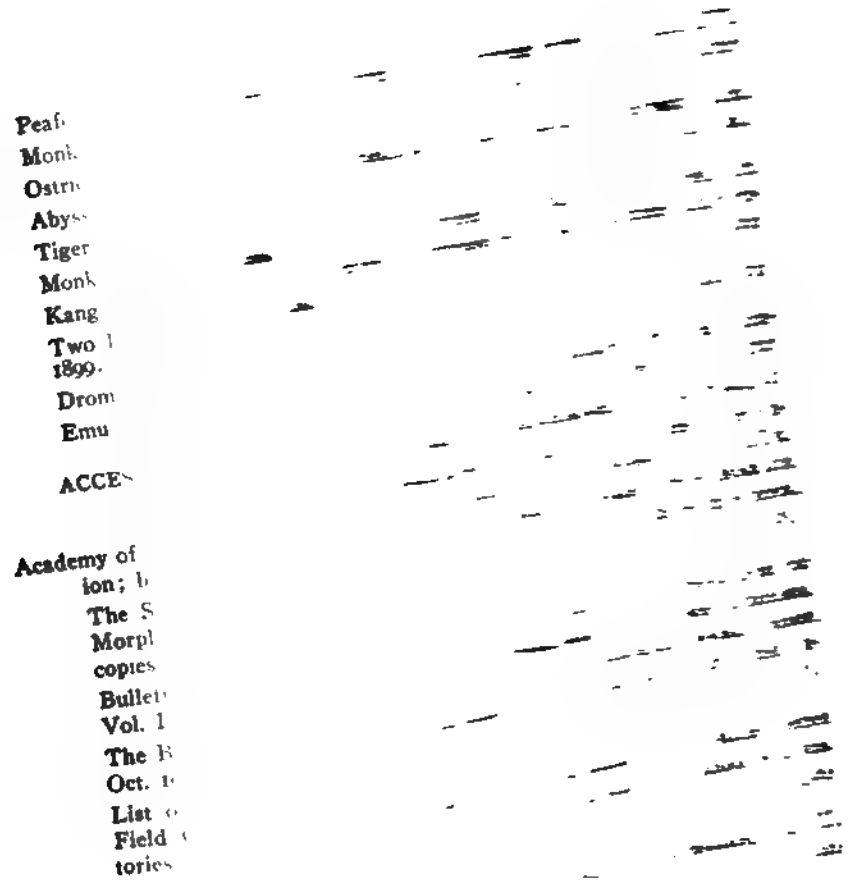
Church, Col. S. H., Pittsburgh, Pa. Diseases and Enemies of Poultry; by Leonard Pearson and B. H. Warren. Feb. 1, 1900.....(338)

Clapp, George H., Pittsburgh, Pa. Catalogue of Casts, Part III., Greek and Roman Sculpture, Boston Museum of Fine Arts; by Edward Robinson. Science Gossip, 1872 and 1873. Oct. 16, 1899.....(308)

Comstock, F. H., Cleveland, O. Composition of the American Sulphur Petroleums; by C. F. Mabery. Nov. 29, 1899.....(318)



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Cunningham, Andrew S. Dunfermline, Scotland. A Busy Week; Mr. Andrew Carnegie at Dumfermline, Kirkcaldy, Dumfries, and Portmahomack. (Two copies.) Dec. 23. 1899.....(326)

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Hatcher, J. B., Pittsburgh, Pa. An examination of the Hepaticæ collected by John B. Hatcher in Southern Patagonia; by Alexander W. Evans. March 6, 1899.....(348)

Heath, Dr. George F., Monroe, Michigan. The Numismatist, Vol. XII., No. 3. April 12, 1899.....(248)

Holland, W. J., Pittsburgh, Pa. The Temple of Deir El Bahari; by Edouard Naville. Part III. Plates LVI.-LXXXVI. Aug. 18, 1899. .....(285)

Knowlton, F. H., Washington, D. C. Catalogue of Cretaceous and Tertiary Plants of North America; by Frank Hall Knowlton. Nov. 7, 1899.....(315)

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A GLIMPSE OF THE PALÆONTOLOGICAL LABORATORY.
(From photograph by W. D Lake.)

Craig, Edward S., Pittsburgh, Pa. Engineering News, Vols. XI., XV., XVI., XVII., XVIII. July 10, 1899.....(278)

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Cunningham, Andrew S. Dunfermline, Scotland. A Busy Week; Mr. Andrew Carnegie at Dumfermline, Kirkcaldy, Dumfries, and Portmahomack. (Two copies.) Dec. 23. 1899.....(326)

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List of Mammals obtained by Thaddeus Surber, collected for the Museum chiefly in Oklahoma and Indian Territories; by D. G. Elliot. Notes on a collection of Fishes and Amphibians from Muskoka and Gull Lakes; by S. E. Meek. The Birds of Eastern North America, Part II.; by Charles B. Cory. Dec. 23, 1899.....(325)

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REPORT OF THE PRESIDENT OF THE ANDREW CARNEGIE NATURALISTS' CLUB.

PITTSBURGH, PA., April 1st, 1900.

DR. W. J. HOLLAND,
Director Carnegie Museum,
Pittsburgh, Penna.

DEAR SIR:

As President of the Andrew Carnegie Naturalists' Club, I have the honor to submit the following report of the work done in that society during the past year.

Since the organization of the club in December, 1896, there has been a steady advance made in many lines, but at no time has the progress been so marked as in the past year. Although at first the attendance was comparatively small, yet the meetings were interesting; but we were not satisfied by any means, and tried several plans by which to increase the attendance. One was successful far beyond our expectations. The plan was this:—at the suggestion of Mr. F. S. Webster three thousand circulars were issued in the schools of the city, inviting any boys interested in natural history to be present at the next regular meeting of the club. At that meeting about one hundred and thirty-five happy, intelligent boys were present. They all seemed anxious and willing to work.

Our membership at the beginning of the year was not more than sixty, and of this number about ten or fifteen was the usual attendance at a meeting. Now, the names of two hundred and thirty boys are on the club books. The average attendance is probably in the neighborhood of one hundred and twenty-five.

THE PRIZES.

Unfortunately the prizes offered by the members of the Museum Committee and Mr. Webster, were offered at the time when the membership was small, in consequence of which very few of the boys entered the competition. However, many took great interest in writing essays, which were often well composed, and showed considerable thought on the part of the writer. The essays were always read in the meetings and their discussion was very interesting.

THE REGULAR MEETINGS.

The regular meetings have been held on every alternate Saturday afternoon at the Carnegie Institute in rooms kindly provided by the Board of Trustees. They have been continued throughout the year with the exception of the summer months, when the club adjourned for the vacation season. The business of the club is first transacted, after which the practical part of the meeting is carried out. There is always a lecture, followed by a general discussion; then if there have been any essays prepared they are read. The meetings in the earlier part of the year were held in the Microscopical Room, but now owing to the great increase in attendance, it is found necessary to use the Lecture-hall.

THE SECTIONS.

Perhaps the most important part of the work of the Club is that done in the classes which have been formed recently for the purpose of individual study in the different branches of natural history. Four classes have already organized and are in charge of the boys more advanced in the science which they study. Regular meeting of the sections are held and rapid progress is being made in all branches of the work. Classes in entomology, mineralogy and geology, ornithology and botany have been formed.

THE PINS.

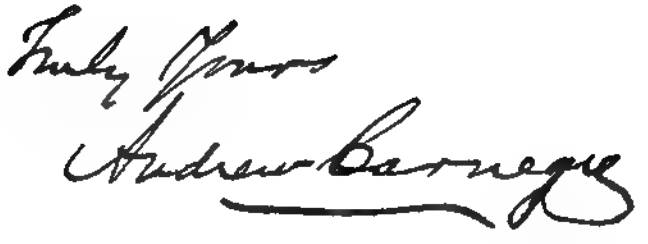
At least three times in our history a committee has been appointed to select a suitable pin and colors for the club. At last we have succeeded in securing the pins which have all been

paid for by the club without any outside assistance. The colors chosen were dark blue and silver. The pins are made on this scheme of color and are diamond shaped with the initials of the club in the center. The filling is blue enamel.

On behalf of the members of the Andrew Carnegie Naturalists' Club I wish to thank the following gentlemen for the interesting and instructive lectures they have so kindly given at our meetings, also for the help and support we have received from them from time to time: Dr. W. J. Holland, Director of the Carnegie Museum, Messrs. Frederic S. Webster, Douglas Stewart, Theodore A. Mills, W. H. Reed, Wm. Harvey Brown, John A. Shafer, E. B. Williamson, and the other members of the Museum Staff; Dr. John A. Brashear, Mr. C. C. Mellor, Col. S. H. Church, and Mr. Geo. H. Clapp, of the Museum Committee; Dr. B. C. Jilson, Prof. Ed. Rynearson, and Prof. W. H. Grant, of the Central High School; and Mr. Knight, of Australia.

Respectfully submitted,

ELLIS MILES FROST,
President.



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THE CARNEGIE MUSEUM

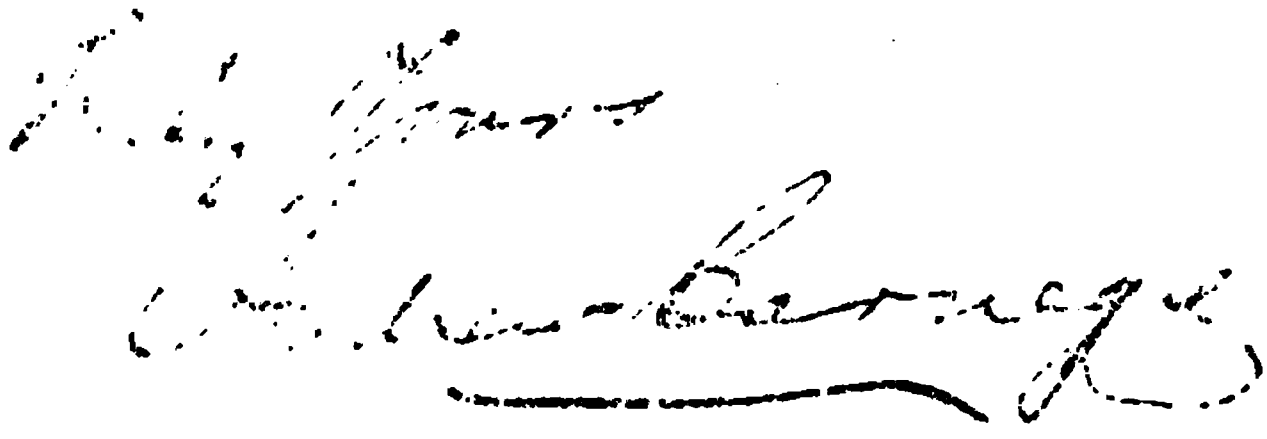
PITTSBURGH

ANNUAL REPORT OF THE DIRECTOR

FOR THE

YEAR ENDING MARCH 31, 1901

1901.



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THE CARNEGIE MUSEUM

PITTSBURGH

ANNUAL REPORT OF THE DIRECTOR

FOR THE

YEAR ENDING MARCH 31, 1901

1901

THE CARNEGIE INSTITUTE, 1899.
(From photograph by A. S. Coggeshall.)

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OF THE
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1900-1901.

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MUSEUM COMMITTEE.
1900-1901.

C. C. MELLOR, *Chairman.*

John A. Brashear,
Samuel H. Church,
Josiah Cohen,
William N. Frew,
George H. Clapp,
Rev. A. A. Lambing,
Mayor W. J. Diehl.

DIRECTOR.

W. J. Holland, Ph.D., LL.D., etc.

*Died March, 1901.

LETTER OF TRANSMITTAL.

MR. C. C. MELLOR,

Chairman of the Committee on the Museum of the Board of Trustees of the Carnegie Institute.

DEAR SIR:

The work of the Carnegie Museum since my last annual report was submitted through you to the Board of Trustees has progressed in all respects most satisfactorily, whether regard be had to the amount, or the quality of the work, which has been done. Fortunately the blessing of health has been enjoyed to a great degree by all the members of the staff, and there has been but little interruption of their labor. We feel keenly and with ever growing force the necessity for enlarged accommodation, and with natural impatience await the coming of the time when the generous plans of the founder of the institution, which have been delayed through no fault of his, shall be executed, and we shall be able to work under even more favorable conditions than those by which we are now surrounded.

In this report, which is the fourth which I have had the honor of preparing as Director of the Museum, I have endeavored to give an idea of the work that has been accomplished during the past year, to correctly set forth the present condition of your property, and to make a few suggestions which appear to me to be worthy of consideration.

I desire to express to you and to the members of the Board of Trustees through you the gratitude which is felt by myself and all my associates for the kindness which has been uniformly shown us by yourself and your colleagues.

I am, very sincerely yours,

W. J. HOLLAND,

Director.

Carnegie Museum, March 31, 1901.

ANNUAL REPORT UPON THE CONDITION AND PROGRESS OF THE CARNEGIE MUSEUM IN PITTSBURGH.

Submitted March 31st, 1901.

By W. J. Holland, Director.

The property of the Carnegie Museum, consisting of the various collections which have been made, purchased, or donated, may be reported to be in excellent condition. No losses of any sort have occurred during the year by accident or theft. The preservation of such collections in good condition necessarily involves considerable labor in a city in which the importance of the consumption of smoke is not as thoroughly appreciated as we trust it will ultimately come to be. If the housewife in this thriving community has reason sometimes to complain of the warfare which she is compelled to carry on against soot and dust, the staff of an institution such as ours is has even greater reason to complain, for many of the objects which are entrusted to our keeping cannot be treated in the same manner in which domestic furniture and textiles are treated in order to rid them of dust. A general house-cleaning took place early in the fall of the year 1900. In this work we were greatly aided through the skillful invention of a machine for using compressed air, designed by Mr. Cunningham, Superintendent of the building. A dynamo mounted upon wheels is used to work a powerful air-pump, by which air is forced into a cylinder of considerable capacity and kept at a nearly uniform pressure of eighty pounds to the square inch. A long hose with a nozzle capable of regulating the flow of the air is attached to the tank. The apparatus is moved from room to room, and by means of the compressed air we have been able to rapidly and most thoroughly clean specimens which could not have been touched with brush or cloth without injuring them. In view of the great success which has attended this application of compressed air I desire in passing to advocate, when the extension of the building is made, the construc-

tion of a plant through which compressed air may be furnished on the several floors of the building where it is required. Skeletons, birds, mammals, the interior of cases in which the specimens are heavy enough to resist the flow of a strong current of air, have all been cleansed by this means, and the result has proved most gratifying. I am not aware that this method has been employed anywhere else, and I desire to express my pleasure in view of the highly satisfactory and economic results flowing from the use of this contrivance. The Museum and the things which it contains are clean.

The property of the Museum has materially increased in worth. I herewith append a statement which shows the approximate value of the collections now in our possession:

STATEMENT OF THE PERSONAL PROPERTY, OR ASSETS, OF THE CARNEGIE MUSEUM, APRIL 1st, 1901.

Collections purchased and made by the Museum, cost		$ 60,138.36
Collections donated of which the cost to the donors is known		39,887.85
Exhibition Cases, cost		20,520.18
Furniture, cost		484.65
Boxes, Trays, Storage Cases, etc., cost		499.70
Herbarium Boxes, etc		376.85
Library	Books donated, estimated value $1,025.00	2,327.85
	Books purchased, cost 1,302.85	
Photographs and Frames		292.29
Photographic Apparatus		200.00
Laboratory Fixtures, cost, less 10 per cent. for annual depreciation		1,026.36
Tools, cost, less 10 per cent. for annual depreciation.		217.31
Total		$125,971.40
Collections deposited with the Museum as loans, valued at		42,250.00
Total		$168,221.40
Total Value of Collections given in Report April 1st, 1900		130,399.55
Increase in value during the year ending April 1st, 1901		$ 37,821.85

To the foregoing amount there might be added the value of the collections which have been given to us without any statement

of their cost. Inasmuch, however, as it would be a great labor to undertake to accurately estimate the value of such gifts, they have been omitted from the foregoing statement.

VISITORS.

The attendance at the Museum has been gratifying. It would not be convenient, in view of the number of approaches, to keep a record of the daily attendance by means of turnstiles, or similar appliances. We are compelled to rely upon estimates based upon counts made upon week-days and holidays. The result of such estimates shows that the attendance, far from having fallen off, has increased during the past year over that of former years. The public evidently highly appreciates the pleasures and advantages which have been afforded by the donor of the Museum to the community. While only comparatively a few of those who visit the Museum record their names in the register, and this is not even open on Sundays, when the rooms are generally thronged, we nevertheless find that the institution has proved itself attractive not only to those who reside in the city, but to multitudes of persons coming from other parts of the land. Every State in the Union, except Maine, four of the Southern States, and Nevada, together with all the Territories are represented upon the register, and visitors have recorded their names from most of the principal countries of Europe, from Egypt, Asia Minor, India, China, Japan, Australia, Mexico, and Brazil. We have also been honored by visits from many distinguished students and men of science, who have come, often from great distances, to study and to consult the collections in our possession, the scientific importance of which is gradually coming to be known, and which is constantly increasing as one addition after another is made to the treasures in our keeping. The attendance on the part of students from the schools and colleges of the city and the adjacent country has been greater than in any former year, and not a small portion of the time of the director and his associates has been taken up in lecturing to classes.

THE STAFF.

By the action of the Committee Rev. A. A. Lambing has been made the Honorary Curator of our Historical Collections,

and Mr. George H. Clapp has been made the Honorary Curator of the Conchological Collections. In the late spring Mr. W. H. Reed, who was connected with the force engaged in field work in Wyoming, tendered his resignation, which was accepted. Mr. Reed's place was filled by the employment as assistants of Mr. C. W. Gilmore and Mr. W. H. Utterback. Mr. Gilmore is a student in the University of Wyoming, who devoted his time during the months of the summer and fall to the Museum, and will probably return to our employment during the coming summer. Since our paleontological expedition returned to the Museum in October, Mr. W. H. Utterback has been in charge of the work of opening the quarry at Canon City, Colorado, which has been leased by the Museum. Mr. Asher W. VanKirk has been added to the force employed in the paleontological laboratory. During the summer months Mr. D. A. Atkinson and Mr. W. W. Worthington were employed as field collectors in the section of zoology. Mr. Marshall Bell for a brief period during the winter months served in the taxidermic laboratory as a volunteer aid. The following is a list of the persons who during the past year have been, for the whole, or a portion of the time, connected with the staff of the Museum:

W. J. Holland, Director and Curator of Entomology, 5th and Bellefield, Pittsburgh.

Rev. A. A. Lambing, Honorary Curator of Historical Collections, St. James R. C. church, Wilkinsburg.

Mr. George H. Clapp, Honorary Curator of Conchology, 325 Water St., Pittsburgh.

Mr. J. B. Hatcher, Curator of Paleontology and Osteology, 3200 Elsinore Square, Pittsburgh.

Mr. Douglas Stewart, Assistant in the Office of the Director, and Custodian of the Mineralogical Collections, 949 Lincoln Ave., Allegheny.

Mr. J. A. Shafer, Custodian in charge of the Botanical Collections, Carnegie Museum.

Mr. W. E. C. Todd, Custodian in charge of the Collections of Recent Vertebrates, Carnegie Museum.

Mr. F. S. Webster, Chief Preparator in the Section of Zoology, 623 South Negley Ave., Pittsburgh.

Mr. Arthur S. Coggeshall, Chief Preparator in the Section of Paleontology, 38 N. Oakland Square, Pittsburgh.

O. A. Peterson, Field Collector and Assistant in Laboratory in the Section of Paleontology, Carnegie Museum.

Mr. Theodore A. Mills, Modeler and Sculptor in the Section of Ethnology, 75 Dithridge St., Pittsburgh.

Mr. Wilson Banks, Modeler, No. 1 Forest Place, Pittsburgh.

Mr. Louis S. Coggeshall, Assistant Preparator in the Section of Paleontology, 420 Atwood St., Pittsburgh.

Mr. A. W. VanKirk, Assistant Preparator in the Section of Paleontology, 314 Whigham St., McKeesport, Pa.

Mr. Gustav A. Link, Assistant Preparator in the Section of Zoology, 126 Eureka St., Pittsburgh.

Miss M. J. Stribling, Stenographer, 730 Filbert St., Pittsburgh.

Miss Rosa Sahrhage, Assistant in the Section of Botany, 414 Cedar Ave., Bloomfield, Pittsburgh.

As was the case a year ago, Mr. Carnegie has made provision for the payment of the salaries of the gentlemen employed in the section of paleontology, with the exception of that of the Curator, which is paid from the general fund. The Director has himself recompensed the Preparator in the section of entomology.

I desire to express my sincere appreciation of the industrious and intelligent efforts of the various persons connected with the staff, who have uniformly proved themselves willing and highly competent for the discharge of the various duties which have been assigned to them.

MAMMALS.

The collection of Mammalia belonging to the Museum is as yet in its infancy, and, compared with the great collections in the possession of some of the kindred institutions in Europe and America, cannot be looked upon with great pride. Nevertheless it contains much that is of high value. Important additions have been made during the past year. A considerable collection of skins and skeletons have been received from Mr. Herbert H. Smith. These were obtained in the province of Santa Marta, in the United States of Colombia. From the

Zoological Gardens of the City of Pittsburgh we have received a number of specimens, one of them the Asiatic elephant "Bebe," the skin and skeleton of which have been preserved for the Museum. I desire in this, as in former reports, to express my appreciation of the kindness shown us by the Director of the Department of Public Works of the City of Pittsburgh, and by Mr. Tretow, the Custodian of the Zoological Gardens, in enabling us to acquire from time to time valuable specimens, the life of which in the Gardens has terminated. From the Director of the Zoological Park in New York City, Mr. William T. Hornaday, we received a fine specimen of the wapiti, the skin of which was prepared for us by a taxidermist in New York City. We are sincerely grateful to the North American Commercial Company of San Francisco for their generous gift to us of eleven specimens representing the seals and sea-lions of the Pribylov Islands, the skins and skeletons of which were skillfully preserved for us and were received in December last. They constitute a very important addition to our zoological collections. Many of the mammals in our possession have been mounted for exhibition by Mr. Webster, and during the last three months he has been devoting the most of his time, at the suggestion of the Director, to the preparation of the mammalia representing the fauna of Pennsylvania. We have contracted for the mounting and delivery to us in the month of June of a specimen of *Rhinoceros simus*, the great white rhinoceros of Africa, which is verging upon extinction. Only four other specimens of this enormous quadruped are at present known in the Museums of the world, one the gift of the Hon. Cecil Rhodes to the South African Museum at Cape Town, another belonging to the British Museum, the third belonging to the Hon. Walter Rothschild and contained in his Museum at Tring; the fourth the property of the Imperial Academy of Sciences in St. Petersburg. The specimen which we shall shortly install in the Museum is, so far as is known, the only specimen which has come to this side of the Atlantic.

BIRDS.

Steady progress has been made in the section of ornithology during the year. According to my last report the collection of birds a year ago contained 5,500 specimens, of which 3,531 be-

longed to the North American series and 2,019 belonged to the exotic series. During the year 2,305 specimens have been added to the North American series, making the total number of specimens in this series 5,836, and 983 specimens have been added to the exotic series, making the total number 3,002. The entire collection of birds in our possession at the present time numbers 8,838 specimens. A special effort was made to complete the collection of birds representing the avifauna of Pennsylvania. This was successful so far forth that 242 out of a possible 317 species are now represented in our collection by local specimens, mostly in good series, and it is expected to add at least twenty species to this number in the near future. The remaining species are very rare, or occasional visitants. They are nevertheless represented in the general collection, with but one or two exceptions, by extra-limital material. Field work was carried on by Mr. W. E. C. Todd and Mr. W. W. Worthington at Presque Isle, near Erie, during the entire spring and fall migration of 1900, and this yielded nearly one thousand finely prepared specimens, the majority of which were water-birds, in which heretofore both the general and local collections had been deficient. A number of desirable specimens have been received from resident collectors at Erie and other points in Pennsylvania, and several species have been secured by exchange. Short trips to obtain special species were also made on a few occasions by Mr. Todd. The general collection of North American birds has been enriched by the acquisition of a set of the McIlhenny birds, from Point Barrow, Alaska, comprising 202 specimens belonging to 39 species, and by nearly a thousand birds from the District of Columbia and Virginia, purchased from Mr. Percy M. Shufeldt. Various single specimens have been received from time to time. Among the additions to the exotic series may be mentioned a set of the birds collected by Mr. Herbert H. Smith in the Province of Santa Marta in Colombia, South America. In the same shipment are included a number of nests and eggs of some of the species, with accessories for the construction of groups. A collection of skins in moderate condition has been received from Mr. William Doherty, representing species found at Mombasa in East Africa. The specimens belonging to the Museum have been for the most part relabeled according to a uniform system. The exhibition series has been

rearranged and increased, and the exhibition collection of birds' eggs has also been completely overhauled. Mr. Webster during the past year completed and installed an important group representing the brown pelican. The group contains nineteen specimens, representing both adult and young birds in all stages of plumage. Mr. Webster has also prepared a striking group representing the ivory-billed woodpecker in its native haunts. This group has not yet been placed upon exhibition.

REPTILES AND BATRACHIANS.

Mr. D. A. Atkinson was employed during the entire summer and early fall in field collecting in the vicinity of Pittsburgh, and received special instructions to complete so far as possible the collection of reptiles and batrachians of the region. In this work he was highly successful, and the result has been the accumulation of a very large mass of interesting and well preserved material of a valuable character, upon which he has based in large part a paper upon the Reptiles of Allegheny County, which is included in the first part of Volume I. of the Annals of the Museum. In addition to the collection made by Mr. Atkinson the Museum has received collections made by the members of the paleontological expedition to Wyoming and Nebraska, and a number of single specimens have been sent in by various donors.

FISHES.

Mr. Atkinson has added to our collection a number of species of the fishes found within the limits of the county. From the United States Fish Commission we have received a collection of the fishes of Porto Rico, representing 108 species. No other important additions have been made to the ichthyological collections during the year that has just ended.

MOLLUSCA.

By intelligent field collecting considerable additions have been made to the series of shells representing the molluscan fauna of western Pennsylvania, and a few rare exotic species have been obtained by purchase. Owing to the limited space at our disposal the very large and valuable collection of shells in our possession has not been rearranged and displayed as it

ought to be and as Mr. Clapp, the Honorary Curator, has promised us that it ultimately shall be.

INSECTS.

Large and important additions have been made to the collections of insects owned by the Museum, or on deposit. The Director has added to the collections which he has placed in the Museum a collection of about 4,500 specimens gathered in East Africa by Mr. William Doherty; 1,500 specimens collected by Mr. Herbert H. Smith in Colombia, South America; collections made in Colorado and other Western States by numerous individuals; a large series of the butterflies and moths of Labrador, obtained by a collector long resident in that part of the world; a small collection made by Rev. M. E. Koonce in Alaska; an important series of insects purchased from dealers in Europe. Fully ten thousand specimens have thus been added to the collection of Lepidoptera. Mr. J. B. Hatcher and Mr. O. A. Peterson made collections of insects for the Museum in Wyoming and Nebraska. Mr. D. A. Atkinson made large collections of the lepidoptera and coleoptera of Allegheny County during the summer months of 1900. Mr. Herbert H. Smith has presented to the Museum several boxes containing insects of a striking character, representing principally the Orthoptera, Diptera, and Hymenoptera of Colombia. The most important addition to the entomological collections during the past year was that of the Ulke collection of Coleoptera, which was purchased in the fall from its owner, Mr. Henry Ulke, of Washington, D. C. This collection, which is one of the most important collections of its kind in the new world, has been the subject of study by all the leading coleopterists of North America. Dr. L. O. Howard, the entomologist of the United States Department of Agriculture, has published in Science, New Series, Vol. XII, page 918, an account of this collection, and in commenting upon its transfer to the Carnegie Museum he says, "While the writer sincerely regrets that the collection could not remain in Washington as the property of the United States National Museum, he feels consolation in the firm conviction that it will be well cared for at Pittsburgh," and states that the addition of this collection to the other entomological treasures in our possession "cannot fail to place the Carnegie Museum in a group of four public institu-

tions which contain collections of insects of great extent and value and which will be consulted by students for generations to come. The other three great collections are to be found at the Museum of Comparative Zoology, at Cambridge, Mass.; the Academy of Natural Sciences, at Philadelphia, Pa., and the United States National Museum, Washington, D. C."

The continual growth of our collections in entomology suggests the importance of securing, if possible, the services of some one who may devote more time to these collections than it has been possible for the Director to bestow in addition to his other labors, although he has been in many respects efficiently aided by Miss L. N. Robin, whom he has employed as Preparator and Assistant.

CRUSTACEA, &c.

The collection of Crustacea has been largely increased by specimens collected by Mr. Atkinson during the summer of 1900, by specimens collected by the paleontological expedition to Wyoming, and by a number of specimens kindly donated to the Museum by the United States Fish Commission. We have also received from the United States Fish Commission a considerable collection of marine invertebrates other than Crustacea, and special thanks are due to the Hon. George M. Bowers, United States Commissioner of Fish and Fisheries, for the interest that he has shown in aiding the institution in securing these valuable additions.

BOTANY.

The work in the section of botany begun last year has been continued. The specimens contained in the various accumulations collected up to the time of my last report have for the most part been poisoned, mounted, and classified, and some of the additional material secured during the year just closed has been treated in the same manner. In this work eleven thousand standard and one thousand half sheets have been used.

Considerable additions have been made to the general herbarium. From Professor Aven Nelson, of the University of Wyoming, we secured by purchase, seven hundred specimens representative of the flora of the Yellowstone Park. Mr. H. H. Negley contributed two small but interesting lots of plants from

changes, save with Prof. T. C. Porter, in whose case the underlying motive has not been so much the acquisition of specimens as the desire to aid him in the preparation of his Flora of Pennsylvania. In view of the large amount of work which has been required in order to poison, mount, and arrange the specimens which have been assembled, no very systematic effort at field work was possible during the past year, and save for the brief excursions made by Mr. J. A. Shafer, the Custodian of the collections, little has been accomplished in this direction. It is hoped, however, that during the coming year, more may be done toward completing a list of our local plants than has hitherto been possible. As preparatory to the completion of such a list the publication in Part I of Vol. I of the Annals of the Museum of a Preliminary List of the Vascular Flora of Allegheny County prepared by Mr. J. A. Shafer, is highly important. We believe that with the assistance of local botanists having this publication in their hands the work of preparing a complete catalogue of the plants of the region of which Pittsburgh is the metropolis will be comparatively easily and speedily effected.

MINERALOGY.

Not much has been done to add to the collection of minerals in our possession. A number of interesting specimens were brought back from Wyoming and Nebraska by the members of the paleontological expedition of 1900. A miscellaneous collection of material was received from the executors of the estate of the late ex-Chancellor George Woods. Mr. Douglas Stewart has kindly loaned a number of specimens of gem-stones in his possession, and with these to supplement the small collection already in our possession he has arranged for exhibition a series, which is very attractive in appearance and naturally excites interest. We are gratified to know that one of our most highly esteemed fellow citizens, who has for many years been making a collection of gems and gem-stones, cherishes the purpose of ultimately presenting the same to the Museum. It would not be in good taste, however, to make any further statement in regard to this matter at the present time.

The entire collection of minerals has been examined and catalogued by Mr. Stewart during the past fall and winter.

CONCRETIONS IN LARAMIE SANDSTONES, CONVERSE CO., WYOMING.
(Photographed by J. B. Hatcher.)

GEOLOGY AND PALEONTOLOGY.

A number of single specimens representing these sciences, collected in various localities by various persons, have been added to our collections during the past year, and we note with pleasure the gift by Mr. Charles D. Walcott, the head of the United States Geological Survey, of ten cotypes of *Beltina danai* Walcott, from the Grayson shales of Montana. A very large addition to our collection of fossil vertebrates was made as the result of the explorations carried on by the paleontological expedition of the year 1900, for which Mr. Carnegie generously provided. The expedition was sent out under the care of Mr. J. B. Hatcher, the Curator of Paleontology, who has already published a brief account of his work in the columns of Science, New Series, Vol. XII., Page 718. After making the necessary preliminary arrangements Mr. Hatcher despatched Messrs. O. A. Peterson and W. H. Reed on a reconnaissance to the country lying west of the region in which the paleontological exploration made during the year 1899 had been carried on. The gentlemen composing this party were subsequently recalled by Mr. Hatcher to the work which had been begun at Camp Carnegie, on Sheep Creek, Albany County, Wyoming. After working together for a short time Mr. Reed's connection with the party terminated, and he was replaced on the staff by Mr. C. W. Gilmore. The work was continued by Messrs. Peterson and Gilmore at this locality until late into the fall, and resulted in the recovery of a very large quantity of most important and valuable material, representing the dinosaurian remains of the Jurassic formation. A large carload of fossil bones was secured and brought from this locality to the Museum. This material with that obtained by the expedition of the previous year from the same spot will make it possible for the Museum to restore a skeleton of *Diplodocus longus* and possibly also of *Brontosaurus excelsus*. When the work ended there was still in sight a vast quantity of bones remarkably free from crushing, which it is intended to take up during the coming spring and summer. The property which we have secured in this neighborhood has proved to be one of the richest and most important deposits of dinosaurian remains which has ever been

found, and the interest of paleontologists has been powerfully excited by the results of the discoveries which have been made.

Professor Hatcher himself undertook the re-exploration of the Laramie Beds in Converse County, from which a number of years ago he recovered for Prof. Marsh a great deal of the most important material belonging to the collections at Yale College and to the collection of the United States Geological Survey at Washington. He had hoped to be able to secure a skeleton of Triceratops. The only specimens which he succeeded in finding were, however, so poorly preserved, that he was finally led to desist from that quest. He, however, was very successful in gathering up a collection fairly representative of the ichthyic and mammalian faunæ of these deposits. Mr. Hatcher subsequently removed from Wyoming to Sioux County, Nebraska, where in the White River Beds he met with phenomenal success, and succeeded in collecting and packing a carload of specimens representing the mammalian fauna of these deposits. Of some portions of these collections made by Mr. Hatcher there has appeared in the first part of Vol. I of the Annals a brief account. This publication will shortly be supplemented by a series of important papers, and Mr. Hatcher has now in hand and is advancing toward completion an important monograph upon the Osteology of Diplodocus.

The material collected by the expedition was all safely delivered at the Museum in November, and the various members of the staff connected with the section of paleontology have been busily at work extracting the bones from the matrix and preparing the skeletons for mounting. We were recently honored by a visit from Prof. Henry Fairfield Osborn, the paleontologist of the United States Geological Survey, who has assured us that such progress, as has been made by the Museum in paleontological research, if continued for a few more years, will bring the Carnegie Museum into the front rank as a center of paleontological inquiry and research.

Mr. Hatcher was assisted in Nebraska by Mr. W. H. Utterback, a skillful field collector, whom he had known and employed as an assistant in former years. When Prof. Hatcher and the other members of the expedition terminated their labor in the west, Mr. Utterback was, with the consent of the Direc-

tor, despatched to Canon City, Colorado, where in the spring of the year 1900, Mr. Hatcher had succeeded in effecting for the Museum a lease of the quarry at one time worked by Prof. Marsh, from which he obtained the most of the skulls of Jurassic dinosaurs which are known to science. Mr. Utterback was instructed to begin the uncovering of a section of the hillside, working down to the stratum in which the fossil remains were known to occur. This work has occupied his entire time, during a portion of which he was assisted by laborers, but we are happy to be able to report that the preliminary work of uncovering has now been completed, and Mr. Utterback in his latest letters reports a very large accumulation of fossil bones which he thinks it will take a considerable length of time to take up. It is needless to say that we are feeling exceedingly happy in view of this revelation. It is very probable that we shall obtain as the result of this undertaking a large amount of fine material.

It is proposed shortly to send out a third expedition from the Museum, and, if as successful as those of former years, we shall have something to report, of which we all may be justly proud.

Before closing my report upon this section of our labors I desire to renew the expressions of gratitude contained in my last annual report to Mr. James McCrea, Vice-president of the Pennsylvania Company; to Mr. Marvin Hughitt, President of the Chicago and Northwestern Railway, and to Mr. Horace G. Burt, the President of the Union Pacific Railway, for their generous grant of free transportation to and from the West to the members of our expedition, and for the free transportation to the Museum of the two cars containing the material collected.

COMPARATIVE ANATOMY AND OSTEOLOGY.

During the past year a few skeletons have been mounted, among them an exceedingly well prepared skeleton of the American Crocodile, showing the dermal plates in position. This skeleton was prepared by Mr. F. S. Webster. A skeleton of *Dinornis maximus* in fine condition was purchased from Ward's Natural Science Establishment, at Rochester, N.Y. The skeletons of a number of animals, which died during the year at the Zoological Garden in Highland Park, were preserved for the Museum, among them the skeleton of an Asiatic elephant. From

Mr. Herbert H. Smith we have received a small series of the skeletons of South American mammals and the skeletons of fifty-three species of South American birds. There are now in our possession many skeletons which require to be macerated and prepared, and I desire to strongly advocate, if the way be clear, the employment of some person who shall undertake this labor under the direction of the Curator of Osteology and Mr. Webster, the Chief Preparator in the section of zoology.

ETHNOLOGY AND ARCHÆOLOGY.

The collection representing the aboriginal races of North America has been enriched by the purchase of sixteen masks of the Pueblo Indians, made by Prof. Frederick Starr, of the University of Chicago; by collections representing the manners and customs of the Moki Indians, obtained from several sources; by the purchase of large series of photographs representing the Indians of the present day. These photographs are of individuals and groups, and were made by F. A. Rinehart of Omaha. We have also received a gift of twenty-one reproductions of portraits of Indians made by Burford. These reproductions were the gift of Mr. S. R. Carter, the President of the Chicago Colortype Company. Mr. and Mrs. R. C. Hall have with great kindness loaned the Museum for a time their large and beautiful collection of Indian blankets and basketry. A couple of small collections of Indian basketry have been purchased.

In the early fall the low stage of water in the Ohio River enabled us to secure molds of the Indian carvings found on the rocks in the bed of the river near Smith's Ferry, a short distance from the Ohio line. It is only occasionally, at times of very low water, that these interesting petroglyphs are exposed to view. The grinding of ice over the rock surfaces and the occasional scraping of coal barges upon the bottom is certain in the process of time to completely obliterate these carvings. Furthermore the construction of a dam at a point below Smith's Ferry is certain in the near future to raise the water to a level which will forever hide them from view. We succeeded in obtaining molds of the most important of these objects, and from them have prepared two series of casts, one, which we will preserve for our own use, another, which we will donate to some kindred institution. A paper upon these interesting petroglyphs is in

process of preparation by the Director. We felicitate ourselves upon having rescued from oblivion these remarkable though exceedingly rude memorials of a race which has now vanished from this part of the country. It is proposed to make similar molds of petroglyphs which are known to occur in several other localities of western Pennsylvania.

In October Mr. Theodore A. Mills installed an important group representing the Moki Snake Dance. The group consists of seven Figures. The costumes were secured from Mr. Thomas V. Keam, of Keam's Canon, Arizona, and are a portion of the costumes which were worn at the annual celebration of the dance in the year 1899.

To Mr. Andrew Carnegie we are indebted for the gift of a series of twenty-one reproductions of memorial stones representing the ancient Mexican civilization, which are preserved in the Mexican National Museum in the City of Mexico. Many of these objects are of large size and striking appearance. Unfortunately the limited room at our command will make it impossible for us to install the entire collection, and some portions at least will have to remain hidden from public view until the extensions to the building which are proposed are completed.

From the Pittsburgh Branch of the Egypt Exploration Fund we received an important collection obtained at Abydos. This collection has been arranged and placed on exhibition by Mr. Stewart.

To the Duc de Loubat, of Paris, France, we are indebted for renewed kindnesses. In the fall of the year he sent us reproductions of three Mexican knives which are believed to have been sent to Europe by Cortez. The blades are made of flint, the handles of curiously carved woods. One of the originals is preserved in the British Museum; the other two are among the treasures of the Vatican. From his highness the Maharajah of Benares we received a kinkob robe taken from the ancestral wardrobe of his Highness and represented to be two hundred years old. It is an exceedingly beautiful fabric. To Mr. John Ferguson and to Mr. Irwin Laughlin we are indebted for the loan to the Museum of extensive collections of Chinese and Japanese *objets de vertu*, and to Col. Edward Jay Allen for the loan of a collection of Indian relics obtained by him many years ago in Oregon and Washington.

The Hall of Ethnology in which the above mentioned collections as well as other collections reported in previous years are contained, proves itself to be most attractive as well as instructive to visitors, but has now begun to be crowded almost to repletion.

NUMISMATICS.

The most important addition made to the collections in this section during the year is a collection of seven hundred and twelve coins collected by Mr. Carnegie on his journey around the world in 1878. The collection contains a number of very fine and rare Oriental coins. The Director while in London last summer secured a number of works relating to Oriental coinage, and with the help of these the collection has been partially arranged and classified. Some further work in this direction requires to be done. Mr. Douglas Stewart has presented the Museum with one silver medal and four bronze medals secured by him at the World's Fair in Paris. They are very beautiful specimens.

Numerous gifts of coins and of paper currency have been received, among the most important being the gifts of Magnus Pflaum, Esq., Mr. Thomas J. Hudson, Mr. James H. Park, and Mr. George H. Clapp.

HISTORICAL COLLECTIONS.

During the year the Director has begun a collection of objects which shall serve to illustrate the domestic and industrial economies of Colonial times. A considerable series of specimens has already been secured. From Mr. J. L. Herring we purchased a number of objects illustrating the early railroad developments in Pennsylvania, and a large collection of the old documents and books relating to the Allegheny Portage Railway Company. This collection has not yet been systematically arranged, and considerable time will be required for this work. From Mr. J. L. Lewis we received a piece of the armor plate of the "Merrimac," marked with an indentation made upon it by one of the cannon-balls of the vessels with which she contended in her memorable fight in Hampton Roads. From Mr. George F. Denniston we received some relics obtained on the site of Dunbar's camp. A number of additions have been made to our collection of historical autographs. From Mr. Wilson Shaw

we received autographs, accompanied by steel portraits, of Patrick Henry and Daniel Webster, and we secured by purchase a considerable collection of autographs of persons who have been prominent in recent events in the Philippine Islands. Among these autographs are those of Admiral Dewey, Generals MacArthur and Otis, and Emilio Aguinaldo. From Mrs. Robert Pitcairn we received a framed copy of the New York Herald of April the 15th, 1865, announcing the assassination of President Lincoln.

While in London during the summer of 1900 the Director secured a copy of the map of Fort Pitt prepared in 1763 and now contained in the King's Library at the British Museum. From this copy blue prints were made, and with the help of the latter the Director modeled two relief maps, one representing Fort Duquesne, and the other Fort Pitt, with the surrounding territory as delineated topographically on the old map. Mr. Theodore A. Mills has made molds from these models, and two sets of these relief maps have been cast by Mr. Mills and are now in process of being finished. Unfortunately the Director has not as much time at his command for this work as he would like to have, but in the near future he hopes to be able to place these maps upon exhibition. One set will be retained by the Museum; the other set will be presented to some kindred institution.

THE TRANSPORTATION EXHIBIT.

This exhibit, the beginning of which was announced in my last report, has made considerable progress during the past year, and much of it has been appropriately installed. Mr. Wilson Banks has made for us a number of models based upon originals kindly loaned by the United States National Museum. He has also prepared for us a number of models made from original designs. Mr. Theodore A. Mills has constructed an exceedingly good model of a pack train and of an Indian traveau, and has in addition furnished figures of men and animals for a number of the vehicles constructed by Mr. Banks. From Mr. Luscombe of Washington we have purchased a number of models, the most important of these being models of two locomotives—the "Tom Thumb Engine" and the "Stourbridge Lion," and a large model of a full-rigged ship. We also secured from

him models of the "Merrimac" and the "Monitor." This collection which it is our purpose to carry forward and enlarge as rapidly as is possible has proved itself highly instructive and attractive.

PUBLICATIONS.

The publication of the Annals of the Carnegie Museum has been begun. No. 1 of Volume I has already issued from the press. Part 2 is ready for the printers. We hope to be able year after year to publish a volume which shall embody the results of the researches of the various members of the staff of the Museum and their friends engaged in carrying on investigations along the same or kindred lines of research. Parallel with the publication of the Annals, but appearing at irregular intervals, will be the publication of the Memoirs. These will contain papers which because of the necessity of illustration will require to be printed in quarto form.

We have availed ourselves of the opportunities of correspondence with kindred institutions furnished by the Bureau of International Exchange under the care of the Smithsonian Institution at Washington, and I am happy to be able to report that in response to a circular of inquiry addressed to the leading Museums and scientific institutions of the world, which accompanied the issue of my last annual report, we have received replies from several hundreds of Museums and learned Societies formally agreeing to place this Museum upon their lists for exchange of publications. The result of the formation of such relations will ultimately be the acquisition of a large amount of valuable literature relating to science, and the value of this collection will be in direct proportion to the importance and value of the publications which are issued by our own institution. The means at our command for purposes of printing, and especially for illustrating, are not as adequate as they perhaps ought to be. But I trust that we shall be able with the consent of the Board to annually set apart enough from our annual appropriation to enable us to make a creditable showing in this sphere of activity.

THE MUSEUM LIBRARY.

The collection of books available for purposes of reference is still very small, and we are greatly hampered in our work by

this lack. The Director has himself personally expended this year a considerable sum of money in purchasing works which were needed for reference and which he finds pleasure in placing within the reach of his colleagues. Mr. Anderson of the Library has kindly consented to purchase a few important works, which are badly needed. It is very much to be wished that the Museum might have a fund at its disposal for the purchase of scientific works. To be compelled at not infrequent intervals to go from Pittsburgh to Philadelphia, New York, or Washington, for the purpose of consulting scientific literature is to say the least somewhat distracting.

CIRCULATING COLLECTIONS.

During the past year collections of birds and insects, prepared in the Museum and mounted in portable cases, so that they may be easily transported from place to place, have been loaned from time to time to the schools. They were found to be especially useful when used in connection with the Vacation Schools which were held during the summer months, and we received directly from teachers and indirectly through the press repeated assurances of the great value of these collections to those who were engaged in instructing the young. We believe that this Museum is the only Museum in which this method of utilizing natural history material has thus far been employed. We intend to add to the collections in ornithology and entomology collections of minerals and other objects. Just as the traveling library has proved itself useful, so the traveling collection of scientific objects may be useful in the work of the schools.

THE ANDREW CARNEGIE NATURALISTS' CLUB.

This organization of young people has continued to maintain a prosperous existence. The meetings of the Club have been held regularly, and the attendance has been large. Girls as well as boys have recently been admitted to membership. At several of the meetings of the Club more than six hundred interested young people have been present to listen to lectures and to take part in other exercises. The Lecture Hall of the Museum has on several occasions been crowded. Field work was carried on during the summer of 1900 under the direction

of Mr. F. S. Webster, who has shown much kind interest in the efforts of the young people to advance their knowledge of nature.

THE PRIZE ESSAY CONTEST.

Ever growing interest seems to attach to this contest. A year ago we reported to you that four hundred and one essays had been submitted in competition. This year I have occasion to note that the number of competitors was more than doubled, eight hundred and forty-three essays having been submitted for the consideration of the judges.

To the ladies and gentlemen who so kindly have continued year after year to serve as judges we owe great gratitude. It is pleasing to notice that this plan of utilizing some portion of the resources at our disposal has evidently met with favor elsewhere, and I have been led to understand in quite recent days that in Chicago it is quite customary now for the school principals and school teachers to require of the pupils in the schools that they shall write essays based upon observations made during a visit to the Museums and Art Galleries of the city in which they live. So the leaven of a good example has made itself felt.

SUGGESTIONS AND PLANS FOR THE ENSUING YEAR.

The work for the ensuing year which has thus far been planned necessarily involves the continuation of the task of classifying and arranging for purposes of study and exhibition the collections which are already in our possession. This will necessitate the discovery, if possible, of additional room for the location of cases. The superintendent of the building has consented to the employment of the space on either side of the small lecture hall for the installation of wall-cases into which some of the collections, notably such as are often used for purposes of demonstration in lectures, may be put, thus opening the way for the installation of other material in the halls upon the second and third floors. It is also desirable, if possible, to have the use of the small room at the entrance of the Museum on the second floor, in which some of our collections are now lodged, but which is mainly used as a lunch-room. This room might well be utilized for library and office purposes. The small room at the end of the corridor on the first floor, now used only

occasionally in the evening by the Pittsburgh Amateur Photographers' Society, might also be used to advantage as a room for study. This would not in any way interfere with its occasional use as at present by the above-mentioned Society. As our offices are now arranged work is carried on amid most trying interruptions, which frequently cause the loss of valuable time. Much of this loss might be obviated by the use of the rooms to which I have called attention.

In addition to the work of classification and arrangement it is proposed to diligently push forward the work of securing collections which shall add to and complete the series in the various sections already established. The work of adding to the paleontological collections will be prosecuted with the funds provided by the founder for this purpose. The sections in which thus far the least has been accomplished are those of mammalogy, ichthyology, and mineralogy. Here we hope to accomplish much during the year which is beginning, and I suggest the appropriation of a definite sum of money for each of these branches at the commencement of the new fiscal year.

The preparation of the considerable quantity of osteological material in our possession for purposes of study and exhibition calls for attention at this time. We ought to secure if possible the services of a competent man for this service. We also could well utilize the services of an increased force in the taxidermic laboratory. While much of the material gotten ready for display could not be exhibited at present it will be all needed when the additions which we hope will ere long be built shall be placed at our disposal. In view of what waits us in the future we feel that no interruption in diligent effort to enlarge our collections should be allowed to occur.

I desire before closing to again emphasize the great and growing need for better reference facilities in the Museum. One of our greatest wants at present is books relating to the various branches of natural science. Had we the money I should advocate the expenditure at once of a considerable sum in works without which we are greatly cramped and hindered in our labors.

But perhaps our crowning want is resources which might enable us to provide for the more perfect illustration of papers prepared for publication in the Annals and Memoirs of the

Museum. The cost of appropriately illustrating scientific articles is of necessity great. While we are availing ourselves of the ordinary methods it would much add to the character and influence of the periodicals issued by the Museum if we had the means to illustrate in colors, utilizing some of the better processes.

FINANCIAL STATEMENT

OF THE

CARNEGIE MUSEUM, PITTSBURGH, PENNA.

April 1st, 1900—April 1st, 1901.

RECEIPTS.

April 1.	To balance on hand	$ 75	56
	Annual Appropriation	25,000	00
May 3.	To Sundry Amounts Refunded account Freight	7	70
" 3.	To Cash account Sale of Material	2	00
" 8.	To Cash account Sale of Material	7	20
Oct. 13.	To Cash account Sale of Material	1	38
" 13.	To Cash Refunded by A. S. Coggeshall...	3	47
" 29.	To Cash Refunded by F. A. Rinehart....	9	00
Nov. 10.	To Cash from Sale of Material	9	50
" 16.	To Cash Refunded by J. A. Shafer.....	10	00
" 27.	To Cash from Sale of Material	2	85
Dec. 21.	To Cash from Andrew Carnegie, account Partial Payment on Collection of Mexican Casts and Freight on Same.....	343	08
" 29.	To Cash from Sale of Material	1	00
1901. March 31.	Total	$25,472	74

DISBURSEMENTS.

Salaries	$13,129 33
Translating	1 00
Traveling Expenses	205 44
Books and Periodicals	155 10
Office Furniture	1 15
Office Supplies	99 89
Postage and Telegrams	153 05
Packing and Unpacking	42 55
Freight and Expressage	377 40
Exhibition Cases	3,759 28
Glassware	89 34
Alcohol and Drugs	252 69
Boxes and Trays	95 20
Printing	332 46
Photographic Supplies	38 72
Laboratory Fixtures	37 28
Laboratory Supplies	106 45
Purchase of Collections	5,695 43
Prize Essay Contest	322 73
Tools	115 05
Rent of Telephone	70 00
Storage	100 00
Repairs	15 90
Petty Cash Advanced to J. A. Shafer	25 00
Revenue Stamps	1 05
Dues Paid Museums' Association	10 44
Herbarium Supplies	188 50
Insect Pins	9 00
Recording Claim to Land in Wyoming	3 50
Frames for Pictures	18 88
	$25,451 81
Balance on hand	20 93
	$25,472 74

STATEMENT

OF THE

CONDITION OF THE SPECIAL FUND PROVIDED BY MR. ANDREW CARNEGIE FOR PALEONTOLOGICAL RESEARCH.

DR.

April 31, 1901:—

To Balance on Hand April 1, 1900.....		$5,873 83
To Interest received on daily balances of portions of the fund drawn from time to time and placed upon deposit subject to check	92 02	
To Sundry Refunds received from J. B. Hatcher	15 26	
To Amount received from Andrew Carnegie on Dec. 21st, 1900	2,000 00	
To Amount received from Andrew Carnegie on Feb. 28th, 1901	8,000 00	
		$15,981 11

CR.

By Expended for Salaries and Labor		$4,126 92
By Field Expenses, April 1st—Oct. 31st..	2,753 90	
By Field Expenses at Canon City, Col., Nov. 1st, 1900—April 1st, 1901.....	326 23	
By Sundry Laboratory Expenses	387 72	
		$ 7,594 77
Balance		$ 8,386 34

Available for work to Dec. 31st, 1901.

REPORT OF THE OFFICER IN CHARGE OF THE CATALOGUE OF ACCESSIONS.

Dr. W. J. Holland,

Director Carnegie Museum.

Dear Sir:

It is with pleasure that I submit to you my report of the accessions to the collections and library of the Carnegie Museum during the fiscal year ending March 31st, 1901.

The total accessions in all sections have been as follows: Permanent accessions, 365; accessions to the Museum library, 125, comprising 41 bound volumes and 403 pamphlets; accessions by loan, 23.

The archæological collection of Mr. W. C. Burns and a number of small loans have been withdrawn by their owners during the year.

The accompanying pages present, in alphabetical sequence, a detailed list of the accumulations during the year from all sources.

Very respectfully,

JOHN A. SHAFER,

Accession Officer.

PERMANENT ACCESSIONS TO THE CARNEGIE MUSEUM.

From April 1, 1900, to April 1, 1901.

(Unless otherwise designated the accessions are by gift.)

Aschman, F. T., Pittsburgh. Private herbarium, estimated at 2,500 specimens. Donation. January 22, 1901 .. .. (1697)

Atkins, J. W., Beaver, Pa. Great Blue Heron, from Beaver, Pa. Donation. July 31, 1900 .. .. (1500)

Atkinson, D. A., Wilkinsburg, Pa. Allegheny County plants, 10 specimens. Collected. July 23, 1900 .. .. (1480)
Mud turtle (Chrysemys marginata), from Squaw Run. Donation. November 19, 1900 .. .. (1634)
Birds from Allegheny County, Pa., 46 species represented by 56 specimens. Purchase. December 29, 1900 .. .. (1688)

Atkinson, D. A. and J. A. Shafer. Galls on oak twig, Fawn Township. July 9, 1900 .. .. (1462)

Bacon, Samuel E., Erie, Pa. Fifteen species of birds from Erie, represented by twenty-three specimens. Purchase and exchange. November 27, 1900—March 28, 1901 .. .. .. (1649, 1675, 1677, 1707, 1718, 1727)

Bailey, Andrew M., Denver, Colorado. Quartz geode, from Routt County, Colorado. Donation. December 17, 1900 .. .. (1660)

Barclay, R. R., Pittsburgh. Long-tailed ichneumon wasp. Donation. June 11, 1900 .. .. (1414)

Birge, E. A., Madison, Wisconsin. Butterfly*(Epargyreus tityrus)*. Donation. June 13, 1900 .. .. (1416)

Bissell, F. S., Pittsburgh. Fungi from a coal mine in Somerset Co., Pa. Donation. June 15, 1900 .. .. (1425)

Boyd, H. W., Natrona, Pa. Slab of fossil ferns from coal mines near Natrona, Pa. Donation. October 15, 1900 .. .. (1586)

Bracken, Anne Q., Pittsburgh. Arrow-head, from Lake Hopatcong, N. J. Donation. December 31, 1900 .. .. (1693)

Braun, Frank H., Brooklyn, N. Y. Thirteen photographs of geological specimens, twenty-three of archæological specimens, June 18, 1900. .. .. (1430)

British Museum, London, England. Tracing of the original map of Fort Pitt at the British Museum. Purchase. Oct. 15, 1900 .. .. (1584)

Burnett, L. E., Medicine Bow, Wyoming. Birds and mammals from Wyoming, six specimens. Purchase. Nov. 26, 1900 .. .. (1641, 1642)

Campbell, E. W., Pittston, Pa. Barn owl, shot at Moosic, Pa. Exchange. October 24, 1900 .. .. (1607)

Barred owls, two specimens, from North Mountain, Pa. Exchange. December 18, 1900 .. .. (1676)

Carnegie, Andrew. Coins collected by Mr. Carnegie on his tour around the world—398 specimens. April 5, 1900 .. .. (1379)

Casts of Ancient Aztec Carvings in the National Museum of Mexico, City of Mexico .. .. (1654)

Andrew Carnegie. (Fossil Fund.)

Vertebrate fossils collected by O. A. Peterson and party in Wyoming, summer of 1900. November 3, 1900 .. .. (1617)

Invertebrate fossils collected in Wyoming by O. A. Peterson and party during the summer of 1900. November 3, 1900 .. .. (1618)

Vertebrate fossils collected by J. B. Hatcher and party in Nebraska during the summer of 1900. November 6, 1900 .. .. .. (1623)

Invertebrate fossils collected by J. B. Hatcher and party in Nebraska during the summer of 1900. November 6, 1900 .. .. (1624)

Fossil plants collected by J. B. Hatcher and party in Nebraska during the summer of 1900. November 6, 1900 .. .. (1625)

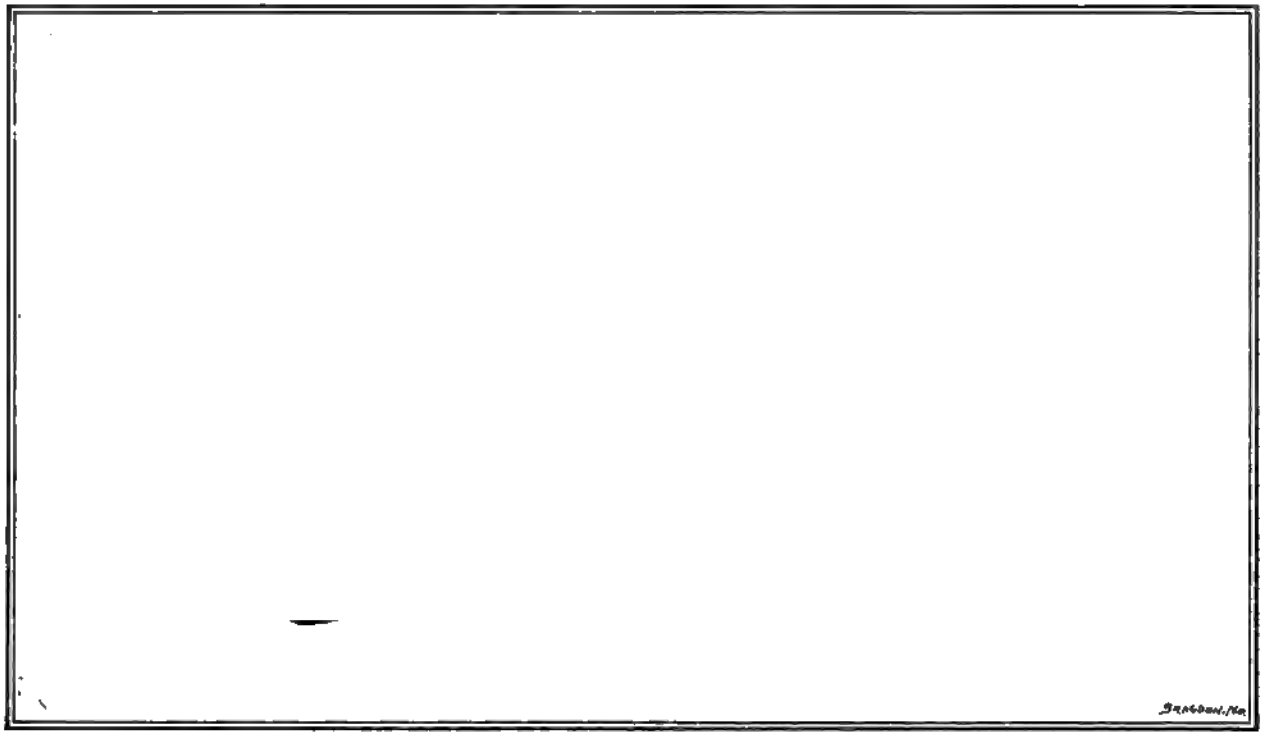
Vertebrate fossils collected by J. B. Hatcher and party in Wyoming during the summer of 1900. November 6, 1900 .. .. (1629)

CARNEGIE MUSEUM STAFF.

Atkinson, D. A. Zoological material collected in vicinity of Pittsburgh, summer of 1900: Mammals, (4); Reptiles, (178); Batrachia, (2737; Fishes, (48); Crustacea, (515); Mollusca, (3775); Lepidoptera, (1584); Coleoptera, (2185); other Insecta, (287); Myriopoda, etc., (1257), and Galls, (27).

Zoological material collected on the peninsula at Erie, Pa., August, 1900: Mammals, (1); Reptiles, (140); Batrachia, (210); Fishes, (2); Insects, (68); Mollusks, (1200); Leeches, (6).

Banks, Wilson. Models made in the Museum laboratories: Mexican carreta; Red River cart; Persian cart; Egyptian chariot; Japanese jinrikisha; Chinese wheelbarrow; Korean one-wheeled traveling chair. Made after models loaned by the U. S. National Museum. June 27, 1900 .. .. (1439)



THE PACK TRAIN.
(Modeled by Theodore A. Mills.)

Sledge drawn by oxen; sledge made of forked sapling; raft, in use at Canadian lumber camps, made from sketches by Dr. W. J. Holland. October 18, 1900 .. .. (1598)

Coggeshall, H. S. Garter snake; Beaver County, Pa. September 10, 1900 .. .. (1553)

Coggeshall, A. S. and J. A. Shafer. Lepidodendron; Beaver Falls, Pa. September 10, 1900 .. .. (1555)

Geodes (limonite concretion), taken from excavation in East Liverpool. September 10, 1900 .. .. (1557)

Holland, Dr. W. J. Columnar basalt from Holyoke, Mass. July 2, 1900. .. .. (1442)

Insects collected at Magnolia, Mass., June 29, 1900—July 2, 1900. .. .. (1443)

Starfish and crayfish from Magnolia Beach, Mass. July 5, 1900. .. .. (1450)

Mollusca (seventy-four specimens) from Magnolia, Mass. July 5, 1900 .. .. (1451)

Granite boulder rounded by the action of the sea; Magnolia Beach, Mass. July 14, 1900 .. .. (1470)

Plants, three species, collected at Mt. Holyoke, Mass., June 29, 1900. December 17, 1900 .. .. (1663)

Collection of baskets, eleven specimens, showing modern work of the Abenaki Indians of Old Town, Maine. Purchase. July 7, 1900. .. .. (1456)

Seven colored plates of express locomotives. Purchase. October 8. 1900 .. .. (1572)

Photographs of English railway trains and old locomotives. Purchase. October 8, 1900 .. .. (1573)

Holland, Dr. W. J. and Party. Twenty-one casts of Indian rock-pictures in the Ohio River near Smith's Ferry, Pa., from which two sets of replicas were made by Mr. Mills. October 15, 1900 .. .. .. (1585)

Hatcher, J. B. Lepidoptera; Converse County, Wyoming. July 5, 1900. .. .. (1452)

Lepidoptera collected near Harrison, Nebraska, July and August, 1900. August 3-13, 1900 .. .. (1503, 1511)

Plants collected in Wyoming, summer of 1900, one hundred and twelve species, represented by three hundred and eleven specimens. October 25, 1900 .. .. (1608)

Plants collected in Nebraska, summer of 1900, sixty-five species, represented by one hundred and five specimens. November 6, 1900. .. .. (1626)

Beaver gnawings, from Warbonnet Creek, Nebraska. November 6, 1900 .. .. (1627)

Alcoholic specimens collected in Wyoming and Nebraska, summer of 1900: Mammals, one; Batrachia, twenty-seven; reptiles, nine; and forty-three bottles of miscellaneous objects. November 6, 1900. .. .. (1628)

For paleontological collections, see Andrew Carnegie (Fossil Fund), page 36).

Mills, T. A. Models made in the Museum laboratories: Figures of fourteen horses and five drivers, used in conjunction with models of Conestoga wagon, dray, stage-coach, and sheepherder's wagon. May 18, 1900 .. .. (1394)

Model illustrating Indians moving camp. May 18, 1900 .. (1395)

Group—Moki Snake Dance, consisting of seven figures, displaying costumes (Acc. 1529) and Rattlesnakes (Acc. 1571). November 4, 1900 .. .. (1599)

Models of seven men, one horse, and eight oxen, used in conjunction with models exhibiting methods of transportation (Accs. Nos. 1439 and 1598). October 18, 1900 .. .. (1600)

Peterson, O. A. Lepidoptera, Sheep Creek, Wyoming. July 13, 1900. .. .. (1467)

Plants collected in Wyoming, summer of 1900—eighty-five species, represented by one hundred and sixty specimens. November 3, 1900 .. .. (1619)

Alcoholic specimens collected in Wyoming during the summer of 1900—twenty-three bottles of miscellaneous objects. November 22, 1900. .. .. (1637)

Mammals collected in Wyoming—Muskrat (skeleton), weasel (skeleton), and prairie dog (skin). November 22, 1900 .. .. .. (1638)

For paleontological collections see Andrew Carnegie (Fossil Fund), page 36).

Reed, W. H. Photographs (four) of fossils in quarry on Sheep Creek, Wyoming. June 14, 1900 .. .. (1422)

Shafer, John A. Plants collected in various sections of Allegheny County, Pa., summer of 1900 .. .. (1387, 1388, 1390, 1408, 1514, 1519, 1526)

Plants collected in Westmoreland County, Pa., July and August, 1900 .. .. (1474, 1526)

Slag containing charcoal, from old Jacobs Creek Furnace, Westmoreland County, Pa., July 20, 1900 .. .. (1475)

Plants collected on the Connoquenessing River and Slippery Rock Creek, July, 1900. July 25, 1900 .. .. (1484)

Plants collected in Beaver County, Pa., and Columbiana County, O., September, 1900. September 10, 1900 .. .. (1558)

Plants collected on Presque Isle, Erie, Pa., September, 1900. October 1, 1900 .. .. (1560)

Todd. W. E. Clyde. Bats *(Lasiurus borealis* Mull.), two specimens, and two minks, from Beaver County, Pa. July 30, 1900 .. .. ..

Cruikshank, O. P., Wilkinsburg, Pa. Horned toad (Phrynosoma cornutum). October 16, 1900 .. .. (1588)

Cunningham, Chas. R., Carnegie Institute. Schedule of the Garfield funeral train from Pittsburgh to Cleveland, C. & P. R. R., September 24, 1881. December 3, 1900 .. .. (1653)

Dadds, J. H., Pittsburgh. Long-tailed ichneumon wasp. June 17, 1900. .. .. (1418)

Davidson, John A., Pittsburgh. Bulldog. June 20, 1900 .. .. .. (1433)

Davis Bros., Diamond, Ohio. Lamps, lanterns, etc., used by the early settlers of Ohio—twenty-five objects. Purchased. August 4, 1900. .. .. (1506)

Davis, Dr. T. D., Pittsburgh. Three Herbarium specimens. December 17, 1900 .. .. (1665)

Davison, F. F., Shousetown, Pa. Rose-breasted grosbeak; Allegheny County, Pa. May 16, 1900 .. .. (1389)

Denniston, George F., Pittsburgh. Relics from Dunbar's camp—three specimens. May 10, 1900 .. .. (1384)

Dippie, George F., Toronto, Canada. Musk-ox (skin). Purchased. May 31, 1900 .. .. (1404)

Doherty, William. African birds—five hundred and thirty-two skins, approximating one hundred and nine species. Purchased. December 18, 1900 .. .. (1674)

Mammals from South Africa (six). Purchased. January 22, 1901. .. .. (1700)

Doritty, Edwin, Pittsburgh. Specimen of *Benacus griseus* Say. August 13, 1900 .. .. (1512)

Egyptian Exploration Fund, Pittsburgh Branch. Egyptian antiquities from Abydos. December 17, 1900 .. .. (1662)

Farquhar, F. S., Montesano, Washington. Nest of Clisiocampa sp. found in Chehalis County, Washington. June 15, 1900 .. .. (1427)

Ferguson, John, Allegheny, Pa. Herbarium specimens—forty-three sheets. December 17, 1900 .. .. (1666)

Fleet, Wm. H., New York, N. Y. Fox skins (seven). Purchased. October 26, 1900 .. .. (1610)

Fohr, Julius, New York, N. Y. Guatemalan silver coin—¼ real. December 10, 1900 .. .. (1658)

Forse, J. C., Pittsburgh. Red-tailed hawk, shot near Lynchburg, Armstrong County, Pa. October 26, 1900 .. .. (1611)

Fowler, M. N., Foxburg, Pa. Moths—two specimens. June 5, 1900. (1410)
Copperhead snake, caught on Clarion River. June 20, 1900.. (1431)

George, James, Cheswick, Pa. Allegheny County plants, five species, represented by twenty-six specimens. December 17, 1900 .. .. (1664)

Gosser, Miss Jennie, Pittsburgh. Perilla frutescens (L.) Britton—twenty-five Herbarium specimens. October 17, 1900 .. .. (1593)

Graf, J. L., Pittsburgh. Tortoise *(Cistudo carolina)*, from Squaw Run, Allegheny County, Pa. July 23, 1900 .. .. (1479)

Gray, Miss Amy, Shousetown, Pa. The "moccasin" flower, from Moon Township, Pa. May 31, 1900 .. .. (1406)

Hagle, Michael, Natrona, Pa. Fossil lepidodendron; Natrona, Pa. August 22, 1900 .. .. (1522)

Hall, Robert C., Pittsburgh. Photographs (fifty) of the Grand Canyon of the Colorado, by H. G. Peabody. Purchase. June 14, 1900. .. .. (1423)

Hamilton, Dr. W. R., Pittsburgh. Seeds of *Jeffersonia diphylla.* July 7, 1900 .. .. (1460)
Plants from Sparrow Lake, Canada, nineteen species, represented by thirty-one specimens. March 30, 1901 .. .. (1742)

Hammer, Edward, Pittsburgh. Eggs of *Samia cecropia.* July 13. 1900. .. .. (1424)

Hanna, Eva, Pittsburgh. Specimen of *Samia cecropia.* July 13, 1900. .. .. (1468)

Hartley, Thomas R., Pittsburgh. Two fragments reputed to be meteoric, and two photographs; Alum Rock Canyon, near San Jose, California. May 28, 1900 .. .. (1401)

Hatcher, J. B., Pittsburgh, Pa. Fossil, *Edriochrinus sacculus,* from Cumberland, Maryland—five specimens. June 18, 1900 .. .. .. (1429)
Five minerals. October 28, 1900 .. .. (1613)
Silver ring made of Spanish coin by Patagonian Indians. February 18, 1901 .. .. (1716)
Chalcedony, from Bad Lands, Dakota. March 20, 1901 .. .. (1726)

Hathaway, H. S., Providence, R. I. Heath-hen *(Tympanuchus cupido)*, Martha's Vineyard, Mass., January 20, 1901. Purchase. February 28, 1901 .. .. (1721)

Hawkins, Dr. John A., Pittsburgh, Pa. Two insects (Rhyssa lunator and R. atrata). June 20, 1900 .. .. (1437)

Hebron, S. M., Pittsburgh. Indian baskets (two). Purchased. February 14, 1901 .. .. (1711)

Herring, Frank C., Derry Station, Pa. Quartz pebble resembling a potato. May 10, 1900 .. .. (1385)

Herring, John L., Derry Station, Pa. Transverse section of socket rail, from Mountain Division, Penna. R. R., used about 1855. April 5, 1900 .. .. (1380)

Old lantern, used by trainmen on the Portage Road about 1845. Purchase. April 10, 1900 .. .. (1381)

Iron Strap Rail from Portage R. R. June 6, 1900 .. .. .. (1411)

Old lantern used by Capt. Bush of the canal-boat *El Dorado*, plying across the Allegheny Mountain by the Portage R. R. Purchase. June 14, 1900 .. .. (1421)

Old railroad documents. Purchase. July 2, 1900 .. .. .. (1441)

Hill, Col. H. R., East Liverpool, Ohio. Geodes (limonite concretion) taken from excavation in East Liverpool. Spetember 10, 1900. .. .. (1556)

Holland, Dr. W. J., Pittsburgh. Slug. May 29, 1900 .. .. (1403)

Plants collected on the American Eclipse Expedition to Japan, 1887, by Dr. W. J. Holland. July 20, 1900 .. .. (1476)

A water-worn pebble of red granite from the beach of Dornoch Firth, Skibo Castle, Scotland. October 8, 1900 .. .. (1575)

Seeds of *Cassia Chamaccrista* (L.) and of *Lathyrus maritimus* (L.) Bigel. New Jersey. October 16, 1900 .. .. (1591)

Plants collected in the vicinity of Cresson, Pa., 1884, thirty-seven species, represented by forty-six specimens. Oct. 14, 1900 .. (1712)

Howard, G. W., Pittsburgh. Two sea-horses and two starfishes, from the Bahama Islands; April, 1898. October 16, 1900 .. .. .. (1589)

Hudson, Thomas J., Pittsburgh. Collection of old currency, twenty-four pieces. August 15, 1900 .. .. (1515)

Keam, Thomas V., Keam's Canyon, Arizona. Moki costumes—three snake priest's, four "antelope's." Purchase. August 30, 1900 .. .. (1529)

Keleher, T. A., U. S. Department of Agriculture, Washington, D. C. A collection illustrating the Silkworm, its development and products. Purchase. November 27, 1900 .. .. (1647)

Kessler, Corporal W. D., Company "I.," 11th U. S. Infantry, Washington Barracks, D. C. Relics from the Philippine Islands. Purchase. Feb. 14, 1901 .. .. (1713)

Knipe, Rev. S. W., Oceanic, N. J. Plants, mostly from Delaware Water-Gap, Pa., thirty-nine species, represented by fifty herbarium specimens. May 14. 1900 .. .. (1386)

Plants collected in Allegheny County, Pa., May 14 and 15, 1900—nineteen species, represented by fifty specimens. May 18, 1900. .. .. (1391)

Plantago aristata M., and *P. Virginica* L., from Monmouth County, N. J. July 7, 1900 .. .. (1455)

Specimens of moss showing formation of calc-tuff, found near Essen, Allegheny County, Pa. August 20, 1900 .. .. (1520)

Koonce, Rev. M. E., Rampart, Alaska. Birdskins (seven species, represented by eight specimens); Rampart, Alaska. Purchase. October 9, 1900, ... (1578)

Kuhns, A. G., Emlenton, Pa. Twigs upon which the female of *Cicada septendecim* has oviposited. June 20, 1900 .. .. (1435)

Lauder, Miss Harriet, Pittsburgh. Curious chip resembling the head of a rabbit, found at Skibo. October 9, 1900 .. .. (1577)

Lehman, George M., Pittsburgh. Old document—table of distances from McKeesport to West Newton on the Youghiogheny River, by James B. McGrew, 1850. November 6, 1900 .. .. (1622)

Leitholf, Oscar, Pittsburgh. Collection of beetles arranged in a picture frame. November 27, 1900 .. .. (1650)

Lewis, J. L., Pittsburgh. Relics of the Civil War: Piece of iron armor-plate of the "Merrimac" with indentation made by cannon-ball, Confederate musket, canteen, etc.—ten objects. April 2, 1900 .. (1378)

Link, G. A., Carnegie Museum. Kittiwake gull, Brünnich's murres (two); Allegheny County, Pa. December 20, 1900 .. .. (1679)

Prunus Padus L.—nine fruiting specimens; *Sonchus oleraceus* L.—one specimen. December 20, 1900 .. .. (1681)

Loubat, Le Duc de, Paris, France. Three models of Mexican knives, the originals of which are believed to have been sent by Cortez to Europe at the time of the conquest, two of them being at present at the Vatican and one at the British Museum. November 23, 1900 .. .. .. (1639)

Luscombe, C. R., Washington, D. C. Models of "Merrimac," "Monitor," and "Tom Thumb engine." Purchased. May 18, 1900 .. .. (1392)

Model of full-rigged ship. Purchased. June 30, 1900 .. .. (1440)

Model of engine—"Stourbridge Lion." Purchased. November 30, 1900 .. .. (1652)

Maharajah of Benares, India. Kinkob robe of one of the ancestors of H. H., the Maharajah. (Through Mr. Charles Graham.) November 27, 1900 .. .. (1644)

Mansfield, I. F., Beaver, Pa. Orchidaceous plants from Beaver County, Pa., collected in 1900—twelve species, represented by fifteen specimens. October 25, 1900 .. .. (1609)

Mayhugh, Edward, Elizabeth, Pa. Bird's nest *(Icterus spurius)*, found near Elizabeth, Pa. August 30, 1900 .. .. (1530)

Archæological specimens (eleven). August 30, 1900 .. .. (1531)

McBride, Dr. J. Z., Burgettstown, Pa. Moth (Samia cecropia). May 26, 1901 .. .. (1400)

Meanor, W. S., Carnot, Pa. Asparagus stalk showing abnormal growth. June 20, 1900 .. .. (1432)

Medsger, O. P., Jacob's Creek, Pa. Bat (Vespertilio fuscus Beauv.) from Westmoreland County, Pa. August 7, 1900 .. .. (1508)

Seeds of four species of plants. November 10, 1900 .. .. .. (1632)

Herbarium specimens of seventy species of plants from Pennsylvania and Ohio, represented by seventy-five specimens. February 7, 1901 .. .. (1709)

Medsger, O. P. and J. A. Shafer. Plants collected at Ohio Pyle, Pa., August 1, 1900. July 9, 1900 .. .. (1461)

Mellor, C. C., Pittsburgh. Photographs (two)—The "Viking" ship at the World's Fair, Chicago, 1893, and Magnus Anderson, Captain of the "Viking" on her voyage across the Atlantic. August 30, 1900. .. .. (1533)

Book of herbarium specimens collected at Trowbridge, England, in 1728. December 29, 1900 .. .. (1687)

Mellor, Walter C., Pittsburgh. Cartridges for Colt's army revolver, made about 1862. (Five cartridges in original wooden case.) November 8, 1900 .. .. (1630)

Merrick, Mrs. F. S., New Brighton, Pa. Photographs (two) of Indians. December 29, 1900 .. .. (1686)

Metcalf, O., Pittsburgh. Machete, with scabbard, from Nueva Caceres, Philippine Islands. November 3, 1900 .. .. (1616)

Miller, W. N., Pittsburgh. Herbarium specimens—three species, represented by ten specimens. June 16, 1900 .. .. (1428)

Seeds of *Chelidonium* and *Sanguinaria* L., and herbarium specimens of *Tephrosia Virginiana* L., and *Osmunda regalis* L., from Allegheny County, Pa. July 7, 1900 .. .. (1459)

Plants collected near Ligonier, Pa., August, 1900—twenty-eight species. October 28, 1900 .. .. (1612)

Allegheny County Plants—five species represented by seven specimens. February 1, 1901 .. .. (1708)

Miller, Robert, Markle, Pa. Branch of oak tree showing abnormal growth. September 14, 1900 .. .. (1559)

Milligan, John M., Swissvale, Pa. Plants collected near Swissvale, August 19, 1900. August 27, 1900 .. .. (1524)

Agave from Florida, specimen of the fruiting stem showing young plants growing on the ends of the pedicels just below the capsule, and specimen of Monotropa uniflora L. January 4, 1901 .. (1694)

DÆMONELIX SPIRALS (Devil's Cork-Screws) IN LOUP FORK DEPOSITS, NEAR HARRISON, SIOUX CO., NEBRASKA.
(Photographed by J. B. Hatcher.)

Mills, Theodore A., Carnegie Museum. Model of "pack train." Purchase. October 16, 1900 .. .. (1592)

Moore, Dr. H. D., New Lexington, Pa. Barred owl from New Lexington, Pa. Decemebr 18, 1900 .. .. (1673)

Morse, E. K., Pittsburgh. Porcupine from Penfield, Pa., December 8, 1900. December 18, 1900 .. .. (1671)

Barred owl, from Penfield, Pa,. December 8, 1900. December 18, 1900 .. .. (1672)

Moss, George, Redman Mills, Pa. Fish-hawk from Beaver River, Pa. October 23, 1900 .. .. (1602)

Myers, E. H., Leasuresville, Butler Co., Pa. Flints dug up on Mr. Myer's farm. November 16, 1900 .. .. (1633)

Nagel, R. A., Leetsdale, Pa. Large hymenopteron from Leet Township, Allegheny County, Pa. August 29, 1900 .. .. (1527)

Negley, H. H., Pittsburgh. Plants from southern California—thirty species, represented by thirty-two herbarium specimens. April 20, 1900. .. .. (1382)

Plants collected by Mr. and Mrs. Negley near San Diego, California, February-March, 1900—thirty-two species, represented by fifty-three herbarium specimens. June 22, 1900 .. .. (1438)

Seeds of fifty varieties of plants, mostly from California. January 11, 1901 .. .. (1696)

Nelson, Aven, Laramie, Wyoming. Plants collected in Yellowstone Park —seven hundred herbarium specimens. Purchase. May 31, 1900. .. .. (1405)

Nelson, Seth, Keating Clinton Co., Pa. Mammals from Clinton Co., Pa.—three species, represented by ten specimens. Purchase. December 20, 1900-January 30, 1901 .. .. (1680, 1703)

North American Commercial Company, San Francisco, California. Bull and cow sea lion skins, cow seal skin, bull seal skin, pup seal skin, pup hair seal, pup seal skin—"albino," bull seal skeleton, cow sea lion skull, bull sea lion skeleton, cow sea lion skeleton, bull sea lion skin. October 15, 1900 .. .. (1583)

Orth, H. J., Pittsburgh. Fossil nut, found at W. Elwood Junction, Beaver County, Pa., thirty feet below the surface. June 13, 1900. .. .. (1417)

Park, James H., Pittsburgh. Four Continental bills. December 10, 1900. .. .. (1657)

Partridge, Miss Bernice, Hat Creek, Wyoming. Pyrite concretion, Fort Pierre shales, Converse County, Wyoming. March 7, 1901..(1723)

Peterson, O. A., Pittsburgh. Calcite concretion Fort Pierre shales, Converse County, Wyoming. March 7, 1901 .. .. (1724)

Pflaum, Magnus, Esq., Pittsburgh. One-ninth of a dollar—paper currency of Maryland. June 20, 1900 .. .. (1434)
Eight copper coins of the United States and one Chinese coin. March 9, 1901 .. .. (1725)

Phillips, William, Pittsburgh. Red-tailed hawk, immature male. October 24, 1900 .. .. (1606)

Pim, W. Paul, Leasuresville, Pa. Mammals from Butler County, Pa., three species, represented by seven specimens. Purchase. July 30, 1900-March 28, 1901 .. .. (1496, 1689, 1706, 1730)
Birds from Butler County, Pa., three species. Purchase. January 30-March 28, 1901 .. .. (1702, 1722, 1728)

Pitcairn, Mrs. Robert, Pittsburgh. "Tappa" cloth—Sandwich Islands. July 2, 1901 .. .. (1444)
New York Herald of April 15, 1865, announcing the assassination of President Abraham Lincoln. July 13, 1900 .. .. (1466)

Porter, Prof. Thomas C., Easton, Pa. Pennsylvania plants—one hundred and fourteen species, represented by one hundred and twenty herbarium specimens. July 7, 1900 .. .. (1458)
Pennsylvania plants—one hundred and five species, represented by one hundred and eleven herbarium specimens. Exchange. October 18, 1900 .. .. (1597)

Powler, Frank, Gloucester, Mass. Snake (Ophibolus doliatus triangulus Boie). July 5, 1900 .. .. (1449)

Preston, C. S., Pittsburgh. Ruby-throated hummingbird. In the flesh. (Skeleton made.) May 19, 1900 .. .. (1396)

Pritt, Clifford, Beverly, West Va. Limonite concretion from Cheat Mountain. November 6, 1900 .. .. (1621)

Rankin, Thomas, Pittsburgh. Twig with abnormal growth, from edge of volcano, Cunavica, Mexico. March 30, 1901 .. .. (1732)

Reinhart, A. G., Pittsburgh. Spanish halter, secured in Spain by the late C. S. Reinhart, about 1880. August 25, 1900 .. .. (1523)

Rinehart, F. A., Omaha, Nebraska. Photographs (two hundred and sixty-three) of American Indians. Purchase. October 12, 1900 .. (1582)

Rost, Hugo, Stoop's Ferry, Pa. Turkey buzzard; Moon Township, Allegheny County, Pa., October 13, 1900. October 18, 1900 .. (1596)
Allegheny County plants, 10 specimens, representing four species. December 17, 1900 .. .. (1667)

Rowe, A. L., Smithton, Pa. Two herbarium specimens from Westmoreland County, Pa. December 12, 1900 .. .. (1659)

Schaefer, E. A., Pittsburgh. Plants collected in Florida. May 29, 1900. .. .. (1402)

Scott, Thomas F., Pittsburgh. Dragonflies (two) from Pittsburgh. May 19, 1900 .. .. (1398)

Shafer, Henry A., Carnot, Pa. Screech owl, red plumage, from Moon Township, Allegheny County, Pa. February 8, 1901 .. .. (1710)

Shafer, John A., Pittsburgh. Wood tortoise (Chelopus insculptus Le Conte) from Harrison Township, Allegheny County, Pa. July 23, 1900 .. .. (1478)

Bats (*Myotis subulatus* Le Conte) from Moon Township, Pa. August 21, 1900 .. .. (1521)

Seeds collected during the summer of 1900, fifty-six species. November 20, 1900 .. .. (1636)

Shafer, John A. and D. A. Atkinson. Galls on oak twig, collected in Fawn Township, Pa., July 8, 1900. July 9, 1900 .. .. (1462)

Shafer, John A. and O. P. Medsger. Plants collected at Ohio Pyle, Pa., July 1, 1900. July 9, 1900 .. .. (1461)

Shafer, Hon. J. D., Pittsburgh. Allegheny County plants, eleven species. December 22, 1900 .. .. (1682)

Shafer, Q. T. and A. T. Shafer, Carnot, Pa. The seventeen-year locust, one hundred and thirty-five specimens. May 31, 1900 .. .. (1409)

Shafer, Theodore A., Carnot, Pa. *Phacelia Purshii* Buckley; Beaver County, Pa. June 8, 1900 .. .. (1413)

Copperhead snake from Moon Township, Pa. August 7, 1900. .. .. (1509)

Shaw, William, Pittsburgh. Bat (*Vespertilio fucus* Beauv.) caught in library building. July 30, 1900 .. .. (1498)

Shaw, Wilson A., Pittsburgh. Autographs of Patrick Henry and Daniel Webster, and engraved portraits of each. January 22, 1901..(1698)

Sherwood, E. L., Beaver, Pa. Clay concretions (two) from cave, Highland County, Ohio. February 25, 1901 .. .. (1717)

Shufeldt, Percy, Washington, D. C. Birds, nine hundred and forty-eight specimens. Purchased. May 31, 1900 .. .. (1407)

Simpson, R. B. Six salamandars from Warren County, Pa., collected in July. August 31, 1900 .. .. (1545)

Birds from Warren County, Pa., five species, represented by eight specimens. Purchase and exchange. December 31, 1900-February 28, 1901. .. ..

Smith, Herbert H. A collection of nests and eggs of birds from the province of Santa Marta, Colomba, South America. Purchase. March 30, 1901 .. .. (1734)

Acciptrine birds from Santa Marta, one hundred and fourteen specimens. Purchase. March 30, 1901 .. .. (1735)

Mammals collected in Santa Marta. Purchase. March 30, 1901. .. .. (1736)

Skeletons of Mammalia from Santa Marta. Purchase. March 30, 1901 .. .. (1737)

Skeletons of birds, sixty-one specimens, from Santa Marta. Purchase. March 30, 1901 .. .. (1738)

Birdskins, three hundred and nineteen specimens, from Santa Marta. Purchase. March 30, 1901 .. .. (1739)

Pinned insects, four boxes. March 30, 1901 .. .. (1740)

Plants, from Santa Marta, approximating twenty-five hundred sheets. March 30, 1901 .. .. (1741)

Spang, Mrs. Norman, Pittsburgh. Collection of shells, corals, etc., from Florida. November 8, 1900 .. .. (1631)

Springer, Mrs., Pittsburgh. Moths *(Callosamia promethea* Drury), three specimens, from cocoons donated by Mrs. Springer. June 13, 1900. .. .. (1419)

Starr, Prof. Frederick, Chicago, Ill. Masks of Pueblo Indians—sixteen. Purchase. May 18, 1900 .. .. (1393)

Stewart, Douglas, Allegheny, Pa. Seeds of Swiss Alpine plants, seventy seven species. October 16, 1900 .. .. (1590)

Model of Venetian gondola. October 17, 1900 .. .. (1594)

Medals (five) secured at the Paris Exposition, 1900. October 17, 1900 .. .. (1595)

Double-crested cormorant (Phalacrocorax dilophus (Swain.)), Conneaut Lake, Pa. December 19, 1900 .. .. (1678)

Stone, Witmer, Philadelphia, Pa. Five species of birds, represented by twenty-one skins. Exchange. August 27, 1900 .. .. (1525)

Birds from Point Barrow, Alaska, thirty-nine species, represented by two hundred and two specimens. Purchase. January 30, 1901. .. .. (1704)

Pennsylvania birds, four species, represented by six skins. Exchange. January 30, 1901 .. .. (1705)

Stoner, Karl, Scottdale, Pa. Seeds of three species of plants. January 4, 1901 .. ..

Swan, Albert, Pittsburgh. Rattlesnake; Hillside Station, Westmoreland County, Pa. August 1, 1900 .. .. (1502)

Symons, Maj. T. F., Buffalo, N. Y. Map of Presque Isle and Erie Harbor, Pa. February 18, 1901 .. .. (1715)

Thorpe, John, Chicago, Ill. Fruit of two species of plants, from Washington Park, Chicago. November 30, 1900 .. .. (1651)

Todd, Clarence, Beaver, Pa. Wood tortoise *(Chelopus insculptus* Le Conte) from Butler County, Pa. October 16, 1900 .. .. .. (1587)

Ulke, Henry, Washington, D. C. The Ulke collection of Coleoptera. Purchase. November 27, 1900 .. .. (1645)

Portrait of Henry Ulke, painted by himself. November 27, 1900. .. .. (1646)

United States Commission of Fish and Fisheries, Washington, D. C. Collection of fishes from Porto Rico, 108 species, represented by 196 specimens. February 15, 1901 .. .. (1714)

United States National Museum, Washington, D. C. Rattlesnakes *(Crotalus confluentus* Say) from Kansas, two specimens. October 8, 1900 .. .. (1571)

Collection of marine invertebrates, one hundred and twenty-five species. November 27, 1900 .. .. (1648)

Beltina danai Walcott—ten cotypes, from Greyson shales near Glenwood and Neihart, Montana. December 17, 1900 .. .. .. (1661)

Van Mierop, P. S., Pittsburgh. Capuchin monkeys—two. (One skin and one skeleton.) November 26, 1900 .. .. (1484, 1683)

Voorhies, Frank D., Toreva, Navajo Co., Arizona. Ethnological material from the Second Mesa, Arizona. Purchased. October 9, December 22, 1900 .. .. (1579, 1683)

Walker, Dr. R. L., Carnegie, Pa. American bittern, Allegheny County, Pa. May 3, 1900 .. .. (1383)

Butt and lock of first model of breech-loading rifle used by the U. S. Government. October 10, 1900 .. .. (1580)

Copperhead snake, collected on Cheat River, W. Va. October 10, 1900 .. .. (1581)

Sparrow hawk, male, juv. November 6, 1900 .. .. (1620)

Cooper's hawk, female, juv.; Allegheny County, Pa. January 30, 1901 .. .. 1701)

Walter, S. P., Linden, Va. Woodcock, from Virginia. October 23, 1900. .. .. (1601)

Ward's Natural Science Establishment, Rochester, N. Y. Skeleton of Moa *(Dinornis maximus* Owen) collected by Dr. Haast, North Island, New Zealand. Also crop stones found with the same. Purchase. October 23, 1900 .. .. (1603, 1604)

Feathers and excrement of Megalopteryx, from cave, Old Man Range, New Zealand. October 23, 1900 .. .. (1605)

Williamson, E. B., Bluffton, Ind. Allegheny County plants, three species, represented by sixteen herbarium specimens. January 22, 1901. .. .. (1699)

Wilson, Miss Harriet Elma, Stormstown, Center County, Pa. Crystals of quartz, Pleasant Gap, Pa. October 9, 1900 .. .. (1576)

Wilson, Karl D., Industry, Pa. Red-bellied woodpecker, from Beaver County, Pa. December 8, 1900 .. .. (1656)

Weasel, from Beaver County, Pa. February 1, 1901 .. .. (1719)

Woods, E. A., Sewickley, Pa. Herbarium specimens—three books, from the collection of the late Dr. George Woods. November 3, 1900. .. .. (1614)

Geological specimens from the collection of the late Dr. George Woods. November 3, 1900 .. . . (1615)

Woodward, Dr. Henry, British Museum, London, England. Photograph of *Dinornis maximus* Owen. October 8, 1900 .. .. (1574)

Worthen, Chas. K., Warsaw, Ill. Bird skins—twenty-three. Purchase. March 28, 1901 .. .. (1731)

Wyack, H. A., Carnot, Pa. Fruiting specimens (two) of ginseng *(Aralia quinquefolia* L.). August 13, 1900 .. .. (1513)

Zarobsky, V. J., Wilmerding, Pa. Section of pine tree showing abnormal growth. December 29, 1900 .. .. (1690)

Austrian copper coin—Francis I., 1800. December 29, 1900.. (1691)

Zoological Garden, Pittsburgh, Pa. Nylghau *(Boselaphus tragocamelus* Pall). May 19, 1900 .. .. (1397)

Wallaby (female) and monkey (small, male). (Made into skins.) May 21, 1900 .. .. (1399)

Asiatic elephant. (Skin and skeleton saved.) November 26, 1900. .. .. (1643)

ACCESSIONS BY LOAN TO THE CARNEGIE MUSEUM.

From April 1, 1900, to April 1, 1901.

Allen, Col. Edward Jay, Pittsburgh. Collection of fifty-four ethnological objects. October 25, 1900 .. .. (181)

Ferguson, John, Pittsburgh. Japanese collection, eleven objects. October 25, 1900 .. .. (182)

Hall, Mr. and Mrs. Robert C., Pittsburgh. Baskets, blankets, etc., from Southwestern Indian tribes, sixty-four specimens. October 25, 1900. .. .. (180)

Hamilton, Dr. Wm. R., Pittsburgh. Two giant grasshoppers from Panama. December 13, 1900 .. .. (188)

Hardy, Wm., Pittsburgh. Colonial winnowing basket; mortar and pestle. February 15, 1901 .. .. (192)

Hebron, S. M., Pittsburgh. Two Indian baskets. November 3, 1900 (185)

Holland, Dr. W. J., Pittsburgh. Private herbarium, approximating 20,000 sheets. August 12, 1900 .. .. (175)

Koch, Walter E., Sharpsburgh, Pa. Four gold nuggets, crystalline; fragment of meteorite. Mexico. January 19, 1901 .. .. (190)

Laughlin, Irwin, Pittsburgh. Japanese collection, eight objects. October 25, 1900 .. .. (183)

Lehman, George M., Pittsburgh. Historical account of Canal Navigation in Pennsylvania. November 10, 1900 .. .. (186)

Mann, H. F., Pittsburgh. Old fashioned sickle. October 17 .. .. (178)

Mellor, C. C., Pittsburgh. Three lithographs, representing Pittsburgh after the great fire of 1845. November 3, 1900 .. .. (184)

Orth, Miss Mary L., Bridgeville, Pa. Indian kiho; San Xavier Mission, Arizona. October 18, 1900 .. .. (179)

Rainey, Rev. W. J., Boston, Mass. Indian relics, Michigan, 1897. April 10, 1900 .. .. (172)

Redstone, C. G., Richwood, West Virginia. Fossil coral (Favosites) from New Brunswick. January 3, 1901 .. .. (189)

Scott, Lieut. J. H., Pittsburgh. Sword, scabbard, and belt, presented to Lieut. Scott by the city of Philadelphia, in recognition of his bravery in rescuing U. S. S. Winslow in Cardenas Harbor, May 11, 1898. February 12, 1901 .. .. (191)

Stewart, Douglas, Allegheny. Collection of cut gem-stones, thirteen specimens. October 17, 1900 .. .. (177)

Indian dancing mask, Alaska. February 28, 1901 .. .. (193)

Temple hanging and house kimono, Japan; four Venetian costumes, eighteenth century. March 20, 1901 .. .. (194)

United States National Museum, Washington, D. C. Models:

Japanese jinrikisha. May 10, 1900 .. .. (173)

Mexican cart, Korean chair, Chinese wheelbarrow. June 5, 1900. .. .. (174)

Red Rivert cart, Egyptian chariot, Persian cart. September 25, 1900 .. .. (176)

Witherspoon, Lieut. Edward T., Pittsburgh. Chinese hand-painted screen, and suit of ancient Japanese armor. November 17, 1900 .. .. .. (187)

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Unless otherwise designated they have been secured by exchange.

Aberdeen Public Library, Aberdeen, Scotland. Annual Report, 1900. February 23, 1901 .. .. (460)

Academy of Science and Art of Pittsburgh. Seven Publications of the Field Columbian Museum. Gift. April 12, 1900 .. .. .. (358, 394)

Annales de l'Observatoire Magnétique et Météorologique de l'Universiteé Imperiale à Odessa, 5me et 6 me Anneés; Matériaux pour la Climatologie du Sud-Ouest de la Russie (Partie du Texte et Cartes). Par A. Klossovsky. Gift. August 15, 1900 .. .. (389)

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THE MOKI SNAKE DANCE.
(Modeled by Theodore A. Mills.)

Canadian Entomologist, London, Ontario, Canada. Current numbers. November 13, 1900 .. .. (416)

Carnegie, Andrew. Four pamphlets on archæology, by Marshall H. Saville. Gift. November 20, 1900 .. .. (423)

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Holland, Dr. W. J., Pittsburgh. Enumeration of the Insects collected in Alaska by Rev. S. Hall Young and M. E. Koonce during the summer of 1899, with Descriptions of some New Species and Variations, by W. J. Holland. Gift. May 5, 1900 .. .. (359)

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Chart of the Mineral Products of the United States from 1889-98 and 1890-99. December 31, 1900 .. .. (441)

United States National Museum, Washington, D. C. Annual Report (1898); Proceedings, Vol. XXII, and six parts; Bulletins, two parts. May 17, 1900-January 24, 1901 .. (365, 372, 380, 412, 421, 447)

Upsala. Geological Institution of the University of Upsala, Sweden. Bulletin, Vol. IV, Part 2, 1899. November 13, 1900 .. .. (415)

Wisconsin Geological and Natural History Survey, Madison, Wisconsin. Bulletins Nos. 3, 5, and 6. November 20, 1900 .. .. (424)

REPORT OF THE PRESIDENT OF THE ANDREW CARNEGIE NATURALISTS' CLUB.

Pittsburgh, Pa., April 1, 1901.

DR. W. J. HOLLAND,
Director of the Carnegie Museum,
Pittsburg, Pa.

Dear Sir:

As President of the Andrew Carnegie Naturalists' Club, I have the honor to submit the following report of the work done in that Society during the past year.

MEETINGS.

Excepting during the summer months, meetings have been held regularly every two weeks in the Lecture Hall. During the summer, a number of field days were held. Excursions were made to suitable places in the vicinity of Pittsburgh, with most gratifying results. On one occasion, the party consisted of as many as 150. The gain to some of the poorer boys of the city, who before had perhaps never come in real touch with nature, cannot be over-estimated. Field days are now considered one of the most profitable features of the Club and will be held frequently during the coming summer.

The first meeting of the Club year was held Sept. 15. Circulars were issued to the schools of the city inviting any boys interested in Natural History to be present at the next meeting. In this way the membership was very much augmented and continued at each succeeding meeting to increase. But a few months ago a plan was adopted which has extended the membership and consequently the helpfulness of the Society farther than any previous device. The ordinary announcement card of lectures was regularly sent to many of the public schools

of the city and teachers and pupils invited to attend. It was not long until the Lecture Hall was, on meeting days, filled to its capacity and a number of the audience compelled to stand; and this is the character of our meetings now.

The need of the co-operation of the schools in our work cannot be too strongly emphasized. Lately there has been a very active interest taken by the schools, mutually satisfactory, we think. The Society can supplement the nature work of the schools, not only through its classes and field work, but also by the facilities afforded by the Museum, as regards specimens, etc.

A word as to our lectures. These are held at each regular meeting and touch on all branches of Natural History. Most of them have been illustrated by natural material, museum models and specimens, and the stereopticon, which, first attempted at the meeting of Feb. 2, has since proved a very interesting and attractive adjunct. On behalf of the members of the Society, I wish to thank the following for lectures and for assistance from time to time and the active interest they have taken in club affairs: Dr. W. J. Holland, Director Carnegie Museum, Mr. Frederic S. Webster, Mr. Douglas Stewart, Miss Louise Klein Miller, Professors Edward Rynearson and Willis H. Grant, of the Central High School, Prof. A. E. Frost, of the Western University, and Mr. Ernest Ingersoll, of Chicago.

MEMBERSHIP EXTENDED TO GIRLS.

Previous to the meeting of Feb. 18 the membership of the Society was restricted to boys. On the above date an amendment to the constitution was passed, granting to girls the privilege of admission to the Society, under the same conditions, with the same rights, as boys. Thus was our field of usefulness very greatly extended.

CLASSES.

There are at present four classes in the Club for instruction in special departments of Nature work. They are as follows: Ornithology, Mr. F. S. Webster; Botany, Mr. Norman Miller; Mineralogy, Mr. G. W. Ulrich; Entomology, Messrs. Ellis M. Frost and Robert F. Foerster. Each class holds a meeting after the lecture of the day. The work is very largely preparative for field work, intended to give members a knowledge of the meth-

ods and materials necessary for field study, besides the requisite knowledge of the natural specimens themselves. Each member of the Club is supposed to belong to one or another of the classes.

PRIZES.

Prizes have been offered by a number of gentlemen interested in the Club for exceptional work of individual members. They are as follows:

Five prizes of $5 each offered by Dr. W. J. Holland for collections of Insects.

A prize of $5 offered by John A. Brashear for the best collection of minerals.

Two prizes of $5 offered by F. S. Webster for the best assays on a theme relating to Natural History.

A prize of $5 offered by Mr. Geo. H. Clapp for the best collection of shells.

A prize of $5 offered by Mr. C. C. Mellor for the best collection of plants.

A prize of a volume of "Oliver Cromwell, A History," offered by the author, Col. S. H. Church, for the best essay on our local history.

A prize of $5 to be paid from the Club Treasury, to the member who shall name at sight the greatest number of our native birds (museum specimens to be used).

Respectfully submitted,

ROBERT F. FOERSTER,

President.

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PITTSBURGH

51

ANNUAL REPORT OF THE DIRECTOR

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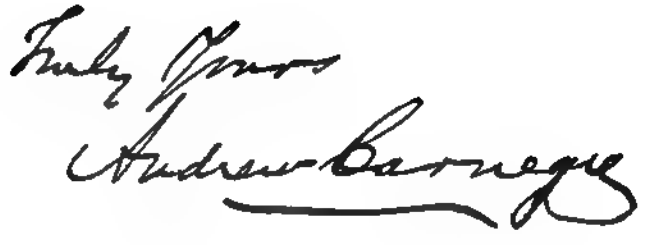
YEAR ENDING MARCH 31, 1902

1902



Publications of the Carnegie Museum: Series .

THE CARNEGIE MUSEUM

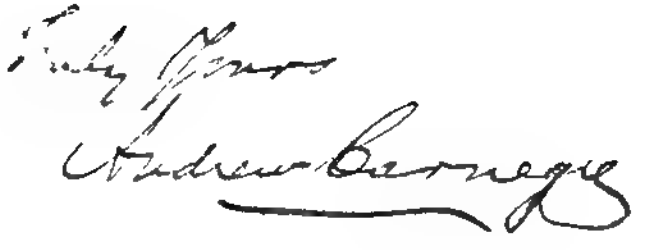
PITTSBURGH

ANNUAL REPORT OF THE DIRECTOR

FOR THE

YEAR ENDING MARCH 31, 1902

1902



Publications of the Carnegie Museum: Serial No. 15

THE CARNEGIE MUSEUM

PITTSBURGH

ANNUAL REPORT OF THE DIRECTOR

FOR THE

YEAR ENDING MARCH 31, 1902

1902

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OF THE

CARNEGIE INSTITUTE

1901—1902.

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Joseph R. Woodwell.

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*Deceased.

MUSEUM COMMITTEE

1900—1901.

C. C. MELLOR, *Chairman.*

John A. Brashear,
Samuel H. Church,
Josiah Cohen,
William N. Frew,
George H. Clapp,
Rev. A. A. Lambing,
Hon. A. M. Brown.

DIRECTOR.

W. J. Holland, Ph.D., LL.D., etc.

LETTER OF TRANSMITTAL.

MR. C. C. MELLOR,

Chairman of the Committee on the Museum of the Board of Trustees of the Carnegie Institute.

DEAR SIR:—I have the honor herewith to submit to you my fifth annual report as Director of the Carnegie Museum.

The report is accompanied by financial statements, showing the expenditures from the general fund for the fiscal year ending at this date. I have added a statement of the amounts expended on account of paleontological research from the fund annually provided by Mr. Carnegie. I also give a detailed statement of our receipts and expenditures on account of publication. This department of our activities is assuming such importance as to justify a separate statement of the manner in which the funds devoted to it have been employed. Appended to the report is the list of accessions for the year. I also append the report of the Secretary of the Pittsburgh Branch of the Egypt Exploration Fund, with a statement of the amounts received, and the manner in which they were applied by the General Committee of Administration in London.

I desire to renew, on behalf of myself and the staff of the Museum, our expressions of sincere gratitude for the uniform courtesy which you and your colleagues in the Board of Trustees have displayed toward us during the year that is past.

I have the honor to be,

Very respectfully yours,

W. J. HOLLAND, *Director.*

ANNUAL REPORT UPON THE CONDITION AND PROGRESS OF THE CARNEGIE MUSEUM IN PITTSBURGH.

Submitted March 31st, 1902.

By W. J. HOLLAND, *Director.*

In reviewing the work which has been accomplished by the Carnegie Museum during the year which has elapsed since I presented my last annual report, I note at the outset the fact that in the life of such an institution as this every added year brings with it increased opportunities for usefulness. Its growth is like that of a tree planted in fertile soil. A few years ago the name of the institution was scarcely known. To-day we find ourselves solicited to furnish information and to aid in the prosecution of special researches by kindred institutions all over the world. Many of the collections, which we have, are known to be unique, and to represent the latest advances in scientific knowledge on the lines for which they stand. Consequently we are in constant correspondence with those who desire information. This phase of our activities is destined with the lapse of years to grow more and more. In this respect our experience is like that of kindred institutions. As the treasures of science accumulate the treasure-house is more and more resorted to, and that not merely by the curious, who are led by their desire to gratify the taste which all men possess for the novel and wonderful, but by those who are engaged in genuine efforts to master the mysteries of nature and to add by independent investigation to the sum of human knowledge. Relations of correspondence and exchange have been established during the past year with many large and important museums, and we begin to realize that the period of our infancy is being succeeded by the dawning years of a robust and vigorous youth. The paleontological researches which have

been carried on for the past three years, and the publications which have begun to be issued in reference to them, have attracted much attention. The rapid growth of our entomological collections, which are to-day undoubtedly the largest in the possession of any institution in this country, has caused the Museum to become the resort of many entomologists. Our botanical collections, which are also increasing, have attracted to us a number of botanists. A constant stream of inquiry pouring into the office by letter from all parts of the United States and from foreign lands shows that the reputation of the Museum is becoming world-wide.

Before taking up in detail an account of the activities of the Museum, I desire first of all to report that in spite of the cramping limitations laid upon us by the narrow quarters in which we are at present forced to labor, the members of the staff, with admirable good nature and commendable diligence, have so adapted themselves to existing circumstances as to perform in the aggregate an amount of work which has not been exceeded in any previous year in the life of the institution. We have all been blessed with a reasonable measure of health and strength, and our days have been full of fruitful effort. The time has, however, come when it is imperatively necessary that some provision, if only temporary, should be made to enlarge the working space of our laboratories. We have at present in our possession the skins and skeletons of a number of the larger mammals which it is impossible to set up in our laboratories because they are too small, and were we even able to set them up it would be impossible to take them out and transfer them to the exhibition halls, because the doorways opening from the laboratories are too small. I have consulted with the Director of the Department of Public Works of the City of Pittsburgh and he has expressed a willingness to assign to us a site somewhere in contiguity to the building for the erection of a temporary structure which might be used for laboratory purposes during the years which are certain to elapse pending the erection of the proposed additions to the new quarters of the Museum. Such a structure as I contemplate might be built comparatively cheaply and the aggregate amount would not equal the sum we would be compelled to pay for rented quarters, even if suitable quarters could be rented in the neighborhood of the Museum.

I may say that I have made inquiry in the neighborhood in order to ascertain whether we could rent a house which might be used for laboratory purposes, but there is no such house to be found. It is desirable that the hippopotamus and the two elephants recently obtained from the Pittsburgh Zoological Gardens, the elephant seals presented by the Alaska Commercial Company and the walruses purchased from Lieutenant Peary should be mounted, but that work could not be done in any house that I have been able to find, because even if we were to set them up we could not take them out without changing the entrances and practically ruining the structure. It seems to me, therefore, advisable that a building, such as has been suggested, provided with large doorways, should be erected. In this the work of mounting and composition could go on. Our specimens could be gotten ready for transference to the large halls which are planned for the new Museum, and could then be installed as soon as those halls are ready to be occupied. In this same building we could also temporarily store collections of various sorts which we have not room now to exhibit, and which, contained in the original packages, stand blocking up hallways and passages in the present building, often very greatly to the discomfort of those who are compelled through them to go in and out. In the estimate which will be presented by the Chairman of the Museum Committee to the members of the Board at the annual meeting will be contained a statement covering the probable cost of such a structure, the site being furnished by the city.

The property represented in the collections that are under the care of the Director has materially grown in value during the past year. The following tabular statement, based upon the books of the institution, is submitted as containing a statement of the value of the contents of the Museum, which is rather under than over the true amount. It must not be forgotten that a very large number of donations is annually made to which no cost is attached, and it is impossible by any system of bookkeeping to even approximate the value of such gifts, which is not inconsiderable.

STATEMENT OF THE PERSONAL PROPERTY, OR ASSETS, OF THE CARNEGIE MUSEUM, APRIL 1st, 1902.

Collections purchased and made by the Museum, cost		$ 75,359.07
Collections donated, of which the cost to the donors is known		57,579.25
Exhibition cases, cost		24,599.19
Furniture, cost		511.15
Boxes, trays, storage cases, etc., cost		726.86
Herbarium boxes, etc., cost		523.85
Library:		
Books donated, estimated value	$1,475.00	
Books purchased, cost	1,700.59	
		3,175.59
Photographs and Frames		340.54
Photographic Apparatus		200.00
Laboratory Fixtures, less ten per cent. for annual depreciation		968.73
Tools, less ten per cent. for annual depreciation		284.90
Publications, Annals and Memoirs on hand for sale and exchange		1,181.06
Total		$165,430.19
Collections deposited with the Museum as loans, valued at		43,100.00
Total		$208,530.19
Total value of collections given in Report, April 1st, 1901		168,221.40
Increase in value during the year ending April 1st, 1902		$ 40,308.79

VISITORS.

As the members of the Board are well aware, no arrangement has been made to record the attendance of visitors at the Museum by means of turnstiles or similar devices. It is therefore impossible to give an absolutely correct statement as to the number of persons who have visited the Museum. The general impression, however, on the part of those who are the attendants,

and who keep an eye on these matters, is that the attendance has not diminished in the least during the past year, but has, on the contrary, grown. Only a few of those persons who come to the Museum enter their names upon the Visitors' Record. The number of such entries, however, during the past year has been greater than in former years, and those recording their names have come from all portions of the United States as well as from most of the principal countries of the globe. A gentleman of wide experience and who is familiar with the museums of the world, not long ago remarked to the Director, after watching the throngs of people enter the building, that he believed he might truthfully say that this is one of the "most frequented museums of the world." Actual counts show that on Sundays there are often as many as three and four thousand persons within the walls, and on some special occasions the attendance is known to have risen to nearly ten thousand. It is unnecessary to say that such crowds in such comparatively small quarters make sight-seeing anything but comfortable, and the clouds of dust that are raised by the passing feet of the throng compel the attendants on the day following to spend their entire time in the work of cleaning the interior.

The most gratifying feature in connection with our work is the manner in which the Museum has continued to be resorted to by pupils in the schools and students in the various institutions of higher learning. Much genuine educational work is being accomplished, and the Director and the members of the staff have been happy to devote all the time they can justly take from other duties to the work of lecturing to the classes, or explaining to them those things in which they have manifested an interest.

THE STAFF.

By the action of the Committee, Mr. Magnus Pflaum has been made Honorary Curator of Numismatics. Mr. Herbert H. Smith and his wife having returned from the United States of Colombia, where they were engaged in collecting material for this Museum and the American Museum of Natural History in New York, have been by action of the Committee recently employed to render assistance in such departments of work as they may prove themselves able to undertake. Mr.

Smith has been engaged a portion of the time in working at the Hartman collection of shells and in going over our collections of coleoptera. In this work Mrs. Smith has been assisting him. Dr. D. A. Atkinson was employed during the summer months to assist Mr. W. E. C. Todd on the expedition which was undertaken to Newfoundland and Labrador. Mr. George E. Mellor accompanied this expedition as a volunteer assistant, at his own expense. His services in this connection are gratefully acknowledged. During the summer and fall Miss L. N. Robin was engaged in remounting the insects belonging to the Knyvett Collection. In the section of paleontology Mr. C. W. Gilmore and Mr. W. H. Utterback have been steadily employed by the Curator. Other assistants were temporarily employed while the work of exploration was being carried on in the fossil fields of the West. For some time past Mr. Louis H. Townsend has been working in the department of taxidermic preparation as a volunteer assistant. The names of those who during the past year have been for the whole or a portion of the time connected with the staff of the Museum are the following:

W. J. Holland, Director, and Curator of Entomology.

Rev. A. A. Lambing, D.D., Honorary Curator of Historical Collections.

Mr. George H. Clapp, Honorary Curator of Conchology.

Mr. Magnus Pflaum, Honorary Curator of Numismatics.

Mr. J. B. Hatcher, Curator of Paleontology and Osteology.

Mr. Douglas Stewart, Assistant in the Office of the Director, and Custodian of the Mineralogical Collections.

Mr. J. A. Shafer, Custodian in Charge of the Botanical Collections, and Accession Office.

Mr. W. E. C. Todd, Custodian in Charge of the Collections of recent Vertebrates.

Mr. F. S. Webster, Chief Preparator in the Section of Zoology.

Mr. Arthur S. Coggeshall, Chief Preparator in the Section of Paleontology.

Mr. O. A. Peterson, Field Collector and Assistant in the Laboratory in the Section of Paleontology.

Mr. Theodore A. Mills, Modeler and Sculptor in the Section of Ethnology.

Mr. Wilson Banks, Modeler.

Mr. Louis S. Coggeshall, Assistant Preparator in the Section of Paleontology.

Mr. C. W. Gilmore, Field Collector and Assistant in the Laboratory in the Section of Paleontology.
Mr. W. H. Utterback, Field Collector and Assistant Preparator in the Section of Paleontology.
Mr. A. W. VanKirk, Assistant Preparator in the Section of Paleontology.
Mr. Gustav A. Link, Assistant Preparator in the Section of Zoology.
Mr. Herbert H. Smith, Assistant in the Section of Zoology.
Mrs. Herbert H. Smith, Assistant in the Section of Zoology.
Dr. D. A. Atkinson, Field Collector in the Section of Zoology.
Miss M. J. Stribling, Stenographer.
Mr. George E. Mellor, Volunteer Assistant in the Section of Zoology.
Mr. Louis H. Townsend, Volunteer Assistant in the Department of Preparation, Section of Zoology.
Miss Rosa Sahrrhage, Assistant in the Section of Botany.
Miss L. N. Robin, Assistant in the Section of Entomology.
Miss Grace Kinzer, Assistant in the Section of Botany.
Mr. H. J. Armor, Messenger.

Provision for the payment of the salaries of those persons who have been employed in the work of the section of paleontology has been made during the past year by Mr. Carnegie, with the exception of the salary of the Curator, which is paid from the general fund.

The good-nature and apt industry of the various persons employed by the institution has been most commendable, and the Director takes the present occasion to express his satisfaction with those who have been by the necessities of the case brought together in the work of the Museum.

MAMMALS.

The collection of mammals belonging to the Museum has been enriched by the gift by the Department of Public Works of Pittsburgh, from the Pittsburgh Zoological Gardens, of a large specimen of the Asiatic elephant, and by a specimen of the larger African hippopotamus. These having died at the Gardens were turned over to the Museum and by Mr. Webster and his assistants prepared as skins and skeletons. To the Trustees of the

Zoological Park in New York City we are indebted for a fine cow moose. The kindness shown by the representatives of both these institutions to this Museum is very highly appreciated. The specimen of the two-horned white rhinoceros *(Rhinoceros Simus)* of Africa, the contemplated purchase of which was announced in my last report, was delivered in August, and has been installed in the Museum. It is the only specimen of this species in any American collection. The expedition to Labrador returned to us a collection of mammals of moderate size, numbering over one hundred specimens. From Mr. Herbert H. Smith we received a number of specimens of smaller mammalia, collected by him in the province of Santa Marta, Colombia, South America. From Mr. M. T. Jones, Quillayute, Washington, the Museum purchased a large puma *(Felis concolor)*, which Mr. Webster is engaged in remounting. Mr. Webster and Mr. Childs Frick donated to the Museum the skins of several small mammals collected by them in Scotland.

A number of contributions of individual specimens of greater or lesser value were received at various times from a number of donors. Of the mammals acquired in former years many have been very skillfully and tastefully mounted by Mr. Webster, and are on exhibition in the East Room on the first floor of the Museum. They nearly fill two of the large wall cases. A large number of the specimens which we possess cannot be exhibited at present because of the lack of room at our command.

Though our collection is still small when compared with those in the possession of older institutions, it is nevertheless slowly increasing, and we confidently expect in the lapse of a few years to make it a truly representative collection of this class of animals. It may be said in passing that in view of the rapid extinction of species over wide areas it is highly important that work in this section should be prosecuted with vigor.

BIRDS.

In my last annual report I stated that the number of specimens in our possession amounted to eight thousand eight hundred and eighty-eight. During the year we have collected and received from collectors in our employment, as well as by donation, about a thousand specimens, so that the number of birds at present owned by the Museum is in the neighborhood

of ten thousand, representing about twelve hundred species. The principal additions to the collections during the year consisted of the birds received from Mr. Herbert H. Smith, and the collections made by the expedition to Labrador and Newfoundland. A number of the hawks collected by Mr. Smith in Colombia, South America, have been mounted by Mr. Link, under the direction of Mr. Webster, and are properly displayed. This collection of hawks is highly interesting. Mr. Webster has mounted and prepared for exhibition a group of Scottish grouse, donated to the Museum by Mr. Childs Frick.

It is highly important that steps should be taken to provide better and more adequate storage facilities for the ornithological collections in our possession. They are at present distributed in storage cases, wherever room can be conveniently found for them, and reference to the collections is very difficult. Cases adapted to the preservation of such collections can be obtained for a very moderate sum, and I strongly recommend that authority be given the Director from the appropriation of the coming year to make provision for the systematic arrangement in properly prepared cases of the ornithological collections. Unless this is promptly done they are liable ultimately to deterioration. In the crowded quarters in which we have been compelled to put them it is neither possible to use them as they should be used, nor to preserve them in the excellent condition in which most of them were originally obtained.

REPTILES AND BATRACHIANS.

A very considerable collection of reptiles was received from Mr. Herbert H. Smith. They have not yet been studied nor classified, but remain in the original packages in which they were received, care having been taken to replenish the alcohol upon them. It is believed that this collection may contain some scientific novelties, but the Director has not yet been able to secure the services of a competent herpetologist to take them in hand and effect their determination. Mr. Webster has recently mounted a specimen of the alligator and a specimen of the American crocodile, obtained by him in Florida in the spring of the year 1899. Both specimens are very strikingly and naturally displayed in characteristic attitudes.

Minor additions to the collection have been made from time to time, by the expedition to Newfoundland and by local collectors.

FISHES.

During the past year nothing has been done to add to our rather small collection of fishes. This department of our activities is less adequately represented than any other in the Museum.

MOLLUSCA.

The purchase of the important collection of mollusca belonging to the late W. D. Hartman, M.D., of West Chester, Pa., has supplemented in a very important manner the already large collections in our possession. The Hartman collection is known all over the world as being in certain genera the richest and most representative collection in existence. This is especially true of the genus Partula, which Dr. Hartman monographed, and which contains a very large number of types and typical specimens. Mr. Herbert H. Smith has recently gone over this portion of the collection and has catalogued it, embodying in his catalogue references to the specimens which he found in the correspondence of Dr. Hartman, which was also acquired at the time the collection came into our possession. This catalogue and its accompanying notes will shortly appear in the Annals of the Museum. We have also received from Mr. Y. Hirase, of Japan, a considerable series of terrestrial mollusca collected by him, in many cases representing species recently discovered by him and for the most part determined by comparison with co-typical material returned to Mr. Hirase by Dr. H. A. Pilsbry, who, as we understand, aided Mr. Hirase in the determination of his Japanese material. From Mr. E. B. Williamson we have received a small colection of Unionidæ from Winona Lake, in northern Indiana.

Other gifts to this section are duly acknowledged in the list of accessions appended to this report.

INSECTS.

A considerable number of minor accessions of insects peculiar to our local fauna has been made during the year. Dr. D. A. Atkinson sent us a small collection of insects collected by him on

the Magdalen Islands. To the collection deposited in the Museum by the Director there have been added during the year important collections received from Alaska, made by different persons; a large collection from Venezuela, purchased from a dealer; an extensive series of North American Heterocera, likewise purchased from various dealers in different parts of the United States or obtained in the process of exchange. From Mr. O. A. Peterson the Museum received a small collection of insects made in western Nebraska. We also received from Mr. Herbert Smith a miscellaneous collection of insects of much interest, obtained by him in the province of Santa Marta. We have contracted with Mr. Herbert H. Smith for the purchase from him of the entire collection of insects owned by him which has for a number of years been on deposit at the Museum. This collection consists of the insects of various orders obtained by him during the years in which he was engaged in the exploration of the regions on the upper waters of the Paraguay and in Brazil, with the exception of the lepidoptera and the diptera, which many years ago Mr. Smith disposed of by sale to other parties. This collection is very large and important, and some portions of it have for a number of years past been in the hands of noted specialists for the purposes of study. Mr. E. T. Cresson, of the Academy of Natural Sciences in Philadlephia, has just published a report upon the *Mutillidae,* in which he describes nearly a hundred new species, the types of which will shortly be returned to the Museum. Mr. Wm. H. Ashmead, of the Department of Agriculture, has prepared an elaborate and careful paper upon the *Chalcidoidea* of the collection, and the Director has authorized him to have prepared drawings to illustrate this important paper, which will contain descriptions of many new genera and species the types of which now become the property of the Carnegie Museum. The collection of hemiptera has been largely worked over by Prof. P. R. Uhler, of the Peabody Institute in Baltimore. His types also become the property of the Museum. The fossorial hymenoptera have been described and written up by Mr. W. J. Fox, of the Academy of Natural Sciences in Philadelphia, who has published eight papers in the Proceedings of the Philadelphia Academy upon these collections, the types of which will shortly be returned to us. It is the intention of the Director to place the remainder of the hitherto unclassified and undetermined ma-

terial in these important collections in the hands of eminent specialists and upon them will be founded a number of valuable scientific contributions to the Annals of this Museum.

During the past month Mr. Herbert H. Smith has been employed in rearranging and preparing for study the very large collection of African coleoptera which the Director in former years succeeded in amassing, with a view to likewise preparing upon this material papers of a descriptive character. It is believed that we have here a multitude of species that are new to science. The study of the collection of South American coleoptera acquired by the purchase of Mr. Smith's material and numbering about eighteen thousand species, remains as a gigantic task to be presently taken up. It is probably the largest collection of South American coleoptera in the United States at the present time. There is labor enough here to employ the entire time of a specialist for several years to come.

It is estimated that the collections of insects in the possession of the Museum aggregate at the present time, including those of the Director which he has deposited with the Museum with a view to their ultimate gift to the institution, about eight hundred thousand specimens, representing approximately one hundred and twenty thousand species. The collections are, therefore, already among the very richest and most important in the United States.

On March 1 the Entomological Society of Western Pennsylvania was organized, with a membership of over twenty. It is certain that this membership will be increased, and through this organization much good work in the interest of entomological science may be hoped for.

CRUSTACEA, ETC.

The collections in this department of research have not been very greatly enriched during the year that has passed. Aside from a few minor contributions nothing worthy of special note has been added to what we already possessed.

BOTANY.

The work in this section has been a continuation of that of the previous year. The selection, poisoning, mounting and labeling of specimens of the older accessions being practically com-

pleted, these are now arranged under genus covers in their respective natural orders in accordance with the system of Engler and Plantl. Much of the newer material, such as the Japanese plants collected in 1887 by the Director, the Nebraska and Wyoming plants collected by Messrs. Hatcher and Peterson the last two summers, the Labrador and Newfoundland plants collected by Dr. Atkinson last summer, etc., etc., have been similarly treated; many of these, however, are not fully identified.

Among the material secured from the Botanical Society of Western Pennsylvania is a set of Sullivant & Lesquereux's *Musci Boreali-Americani,* distributed in 1865. This had formerly been the property of the late Dr. John Dickson, of this city, a personal friend of Prof. Lesquereux. It doubtless was a complimentary set. The specimens were found to be in excellent condition; to all appearance the bulk of it had never been disturbed since it was placed in position by these illustrious bryologists. These specimens have also been mounted and made available to the students of mosses, a number of whom have lately appeared in our midst, and to whom they are of great interest.

Eight thousand standard and five hundred half sheets have been used in this work.

No considerable additions have been made to the general herbarium, because of our inability to make purchases. Nevertheless our friends have continued their interest. Dr. W. R. Hamilton has continued his contributions of Canadian plants. He also gave a collection of Californian plants collected last winter. Rev. S. W. Knipe, of Oceanic, N. J., has continued his remembrances by a considerable contribution of specimens collected by himself and members of his family in New Jersey and North Carolina during the past summer.

Rev. G. A. Eifrick, of Cumberland, Maryland, has sent us a number of plants from that State. From Dr. T. D. Davis we have a small collection made by himself in the Yellowstone Park. Mr. W. W. Ashe, of Raleigh, North Carolina, has presented about twenty-five of the newer *Crataegi,* mostly species of his own naming.

Mr. F. S. Webster donated a small but interesting collection made in Scotland; Mr. O. A. Peterson contributed many specimens from Sioux County, Nebraska; Dr. Atkinson's collecting

in Labrador and Newfoundland added a number of species not hitherto contained in our herbarium.

Mr. Shafer contributed the result of several days' collecting, in conjunction with Mr. R. Cameron and his son, of Queen Victoria Park, in the vicinity of Niagara Falls, while on his vacation the past summer.

Prof. W. A. Kellerman, of Columbus, Ohio, kindly donated a small collection of fungi, principally parasitic. He has also sent us the first and second fascicles of his *Fungi Exsiccati of Ohio.* Through the efforts of Mr. J. B. Hatcher we have from Prof. G. F. Eaton a set of *Sphagna Boreali Americana,* collected by Prof. D. C. Eaton and E. Faxon, and upon which Prof. Eaton was at work just before he died.

The Pennsylvania Herbarium has also been brought into good order, the older material being arranged as in the general herbarium, and is now readily and conveniently accessible, save for the crowded condition of the boxes, which will be relieved shortly by the addition of a considerable number of new ones. Important additions were received and the range of counties considerably enlarged. From Mr. H. H. Negley were received a lot of Centre County plants collected by him in the early sixties. Rev. S. W. Knipe sent some York County specimens. Prof. D. R. Sumstine presented many specimens from Armstrong County, mostly fungi. Our quite representative collection of the flora of Westmoreland County was added to by Miss Catherine R. Holmes, W. N. Miller, O. P. Medsger, and others. Blair, Crawford, Fayette, Greene, Indiana and Washington Counties were touched by short excursions of Mr. Shafer, and yielded some very interesting material, the value of which cannot be estimated until the appearance of the late Prof. T. C. Porter's work on the Flora of Pennsylvania, which is momentarily expected from the publishers.

In the work on the flora of Allegheny County many members of the Botanical Society participated. Many of the species recorded in the Preliminary List as reported have been collected and are now represented by specimens.

Only two specimens new to the county were discovered, except in the genus Crataegus, in which some special effort has been made. Mr. W. W. Ashe, to whom some of the material has been submitted, announces a number of new species, eight of

which are being described in Vol. I, Part 3, of the Annals, to appear shortly.

MINERALOGY.

The collection of minerals belonging to the Museum has not grown as rapidly as is desirable in view of the great importance of such collections in a community in which so much thought is given to the industries which are founded upon the mineral resources of the country. In order, if possible, to increase these collections the Director recently addressed a letter to the heads of a number of firms and likewise to a number of individuals who are engaged in mining and in treating various ores and earths for industrial purposes. In the letter the Director requests these parties, if agreeable, to donate to the Museum representative collections of such minerals as are obtained or handled by them. The result has been the receipt of gratifying responses from a number of parties, who have kindly donated to the Museum representative collections which will very materially enhance the value and interest of the display which we have been able to make of the mineral industries of the country. We most sincerely hope that it may be made possible for us with an increased appropriation to add to our collection of minerals by the purchase, from time to time, of specimens which are required in order to complete a representative series.

In this connection I have the honor to transmit to the Board of Trustees, through the Chairman of the Museum Committee, a letter which has been received by me from Mr. John L. Lewis, one of our most esteemed citizens, in which he kindly tenders to the Board for the Museum the beautiful and very valuable collection of gems and gem-stones, the acquisition of which he has made a labor of love for thirty years past, and in amassing which he has not only expended a great deal of time, but a large sum of money. This exceedingly generous and gracious gift it seems to me should call for a special resolution of thanks from the Board of Trustees. In order that this collection may be properly displayed it becomes necessary for us to provide a series of cases properly constructed in which the collection may be arranged and put on exhibition. The cost of such cases is included in the estimate which the Chairman of the Museum Committee will submit to the Board.

I desire to acknowledge in this connection the great interest which has been shown by Mr. Douglas Stewart, the Custodian of the collection of minerals, in this important branch of our activity. With most commendable zeal he has labored to build up the collection during the past year, and has undertaken the removal of our present collections from the middle room on the first floor to the west room on the third floor, where it has been agreed that these collections will be exhibited in connection with the collection of gems and gem-stones the gift of which I have spoken of in the preceding paragraph.

GEOLOGY AND PALEONTOLOGY.

Some work relating to the geology of our immediate neighborhood has been done during the past year and among other gifts it gives me pleasure to mention with especial gratitude the donation, by Mr. S. M. McElroy and Mr. G. N. Ohl, of a diamond drill core over 420 feet in length, showing the formation of the various strata and the intercalated seams of coal as represented at a point on the Clokeyville Farm, on the line of the Southwestern Branch of the Baltimore & Ohio Railroal, in Washington Co., Pa. At present, owing to lack of room, it is impossible for us to install this core as it should be installed for exhibition and study, but in the Hall of Mineralogy, provision for which has been made in the plans of the enlarged building, this object will constitute a very interesting subject for study, showing, as it does, the character of the rock and coal formations of the region.

During the month of last June the Director granted to Prof. J. B. Hatcher permission to accompany an expedition sent out by the United States Geological Survey in the Rocky Mountain Region, the Director of the Survey being anxious to avail himself of the special knowledge possessed by Prof. Hatcher in reference to the region which was traversed.

The paleontological researches begun in the summer of 1899, for which provision was generously male by Mr. Carnegie through the gift of a special fund for this purpose, were prosecuted with vigor. During the summer months field parties operated in the Tertiary and Mesozoic formations of Nebraska, Wyoming and Colorado. One party labored in the Oligocene and Miocene deposits of Sioux Co., Nebraska, and was in charge of Mr. O. A. Peterson; another, in charge of Mr. C. W. Gil-

more, collected in the Jurassic on Sheep Creek, Albany Co., Wyoming; a third was at work in the Jurassic near Canyon City, Colorado, under Mr. W. H. Utterback. The Curator himself exercised a personal oversight over these expeditions, and besides did much work of valuable exploration and collection at other points in the region.

The success of these parties was most gratifying, and it is difficult to say which was the more successful. The Morosaurus, Stegosaurus and Brontosaurus skeletons collected by Messrs. Gilmore and Utterback were most welcome and valuable additions to our collections of fossil reptiles, while the skeletons of Daphænus, Hoplophoneus, Protolabis, Mesohippus, Cyclopidius and Promerycochœrus secured by Mr. Peterson will add much to the value of our collections of fossil mammals. The energy and industry shown by these gentlemen in prosecuting the work assigned to them while in the field has been most exemplary and worthy of the fullest approval, not alone of the Director, but of the Trustees and friends of the Museum.

In addition to the collections made by the regular field parties something over a hundred and fifty species and more than five hundred specimens of vertebrate and invertebrate fossils have been added to the collections through exchanges made with the Königlichen Naturalien-Cabinet of Stuttgart, Germany, the U. S. National Museum at Washington, and the Museums of Yale and Princeton Universities. A small collection of rare Cystideans was also secured by purchase from a dealer.

To the collection of books relating to paleontology there has been added something over five hundred bound and unbound volumes and separates, including complete sets of the Quarterly Journal of the Geological Society of London, the Publications of the Palæontographical Society of London, and of the Palæontologia Indica. Together with the serials and works of reference in the general library of the Institute and the Curator's private collection there is now available the nucleus for a good working library on subjects relating to geology and paleontology, and by the judicious expenditure of moderate annual allowances, aided by our exchanges, it is confidently hoped that within a few years most of the more important gaps may be filled.

In the laboratory Mr. A. S. Coggeshall, assisted by Messrs. L. S. Coggeshall, A. W. Van Kirk, and throughout the winter

months by O. A. Peterson, C. W. Gilmore and W. H. Utterback, has successfully mounted, in a most skilful and satisfactory manner, the skeletons of Titanotherium and Trigonias, collected in the Oligocene beds of northwestern Nebraska during the season of 1900. Mr. Peterson has prepared for mounting the skeleton of Daphænus and a considerable portion of the skeletons of Hoplophoneus and Protolabis. Messrs. Gilmore, L. Coggeshall and A. W. Van Kirk have been engaged in preparing for study and exhibition the skeleton of Brontosaurus collected by Mr. Gilmore, while Mr. Utterback has been similarly engaged with the skeleton of Morosaurus collected by himself at Canyon City.

The collections so far as they have been unpacked have been card-catalogued in duplicate.

The publications issued from the department during the year have been the following:

Diplodocus Marsh, Its Osteology, Taxonomy, and Probable Habits, with a Restoration of the Skeleton. Vol. I, No. 1, Mem. Car. Mus. pp. 1-63, Pl. I-XIII, and twenty-four figures in text.

On the Cranial Elements and the Deciduous and Permanent Dentitions of Titanotherium, Vol. I, No. 2, An. Car. Mus. pp. 256-262, Plates VII and VIII, one text figure.

Sabal Rigida: A New Species of Palm from the Laramie. Vol. I, No. 2, An. Car. Mus. pp. 263-264, one text figure.

The Jurassic Dinosaur Deposits near Canyon City, Colorado. Vol. I, No. 2, An. Car. Mus. pp. 327-341, with five figures in text.

On the Structure of the Manus in Brontosaurus. Sci. N. S. Vol. XIV, pp. 1015-1017.

The Director cannot conclude his reference to the work of this department without expressing in the highest terms his appreciation of the indefatigable efforts of the Curator of Paleontology, Prof. J. B. Hatcher, whose learning and zeal assure us the acquisition under his admirable administration within a few years of one of the most important collections of its character not only in America but, it may truthfully be said, in the world.

COMPARATIVE ANATOMY AND OSTEOLOGY.

The collections in this department have been materially increased by a considerable series of the skeletons of South American birds, added to those previously obtained through Mr. Herbert

H. Smith from Colombia. The skeletons of the elephant and the hippopotamus, turned over to us by the Pittsburgh Zoological Gardens, have been carefully preserved and are at the present time being macerated and prepared for articulation under the supervision of Mr. F. S. Webster. Mr. Francis J. Torrance, of the Standard Manufacturing Co., with great kindness donated to the Museum a large enameled tank, which has been fitted up in such a manner as to admit of the proper boiling in its capacious recesses of the large bones of these vertebrates. That the collections of rough skeletons which we have acquired, now numbering representatives of several hundred species, may be cleansed and articulated so as to be, untilized for purposes of exhibition, is earnestly desired by the Director. That this may be speedily accomplished, it is important that there should be added to the staff a skilled workman capable of taking up this task and devoting himself to it for some time to come. One of our most pressing needs is the services of an osteological preparator. This work so far as it has been done has heretofore been principally relegated to Mr. F. S. Webster, than whom we could find no more competent person, but the immense amount of work in other directions for which he is peculiarly well qualified makes it perfectly plain that the services of an assistant in this form of labor are needed.

ETHNOLOGY AND ARCHAEOLOGY.

The work of adding to the collections representing the aboriginal races of America has gone on during the past year with as much vigor as was possible in view of our cramped space and the comparatively small sum of money which was at our disposal for these purposes. We have been offered by the executrix of the estate of the late Thomas Harper his collection of Indian relics, which has for some years past been deposited in the Museum. Final negotiations for the acquisition of this collection have not been concluded, but the Director desires to recommend the purchase of this collection if a satisfactory arrangement can be made. It has been the object of much interest to visitors at the Museum. From Mr. Herbert H. Smith we have secured a large and interesting series of specimens taken from Indian graves in the province of Santa Marta.

Mr. Theodore A. Mills has modeled a number of Indian groups, not all of which have been placed on exhibition because of lack of room. One case, containing a representation of a *Zuni bride,* founded upon photographs and material collected for us by Mr. F. D. Voorhies, has been placed upon exhibition.

Our archæological collections representing the civilizations of Egypt have received very notable additions during the year that is past, through the kindness of Mr. Carnegie and the generosity of the citizens of Pittsburgh who have contributed to the Egypt Exporation Fund. The gift by Mr. Carnegie of an ancient Egyptian boat, obtained near Dahshur, which was secured for the Museum from the Egyptian authorities by the kindly intervention of Mr. Edward E. Ayer, of Chicago, has awakened widespread interest throughout the country. Unfortunately we are not able at present to place this most interesting relic of antiquity upon regular exhibition, owing to the lack of space on our floors, and, secondly, to the impossibility of bringing the boat into the building. Being probably the most ancient specimen of naval architecture in existence, with the exception of two or three other specimens which were recovered at the same time, this boat is a most valuable object lesson in the history of the development of human arts. Among the objects obtained by us through the Egypt Exploration Fund notice should be given to relics obtained from the tomb of the pre-dynastic king Ka, and to the considerable assemblage of specimens obtained from the tombs of the kings of the first Egyptian dynasty, personages who until a few years ago were believed to be mythical, but who are now known to have been historical, the time of whose reigns has been approximately fixed by Messrs. Brugsch and Mariette Bey. To see and to handle jewelry and objects of domestic untility which were possessed by kings whose reigns antedated the period of Moses by a lapse of years almost as long as that which intervenes between the time of Moses and our own, is profoundly interesting, and our city may well be proud to have within her treasure-house of science an assemblage of such specimens, which serve vividly to suggest to our mind the lengthy period in which human hopes and human ambitions have played their part in the field of history.

As a supplement to this section of this Annual Report the Director includes the Report of the Secretary of the Pittsburgh

Branch of the Egypt Exploration Fund, together with an accompanying financial statement.

NUMISMATICS.

In view of the signal interest which has been shown by Magnus Pflaum, Esq., who some years ago donated his own private collection of coins to the Museum to constitute a nucleus for such a collection, the Committee of Administration resolved at a recent meeting to invite Mr. Pflaum to act as the Honorary Curator of these collections, it being felt that he possesses to a higher degree than any one else in the community those qualifications which fit him to undertake the general oversight and labeling of the material which he originally donated and to which important additions have from time to time been made. Mr. Pflaum, although a very busy man, has kindly consented to undertake this work as he may have leisure to devote himself to it.

The most important accession received during the present year is the gift, by Mr. S. Harry Vandergrift, of a large collection of coins made by him in former years, consisting not only of a great number of coins of the United States, but of foreign countries, and a very large number of specimens of paper money issued at various periods in the history of our own country. This collection cost Mr. Vandergrift approximately four thousand five hundred dollars, and his generosity in turning it over to the Museum is very highly appreciated.

Among the things obtained from the Egypt Exploration Fund was a large series of coins representing the reigns of various Roman emperors. Many of these are in excellent condition.

HISTORICAL COLLECTIONS.

Many interesting objects relating to local history have been acquired by gift during the past year. From the Hon. W. J. Diehl, an original letter from William Pitt, addressed to the Commandant at Fort Pitt, August the 23d, 1760; from Hon. A. M. Brown, Recorder, the old seal of the City of Pittsburgh, in use until the enactment of the recent charter; by resolution of the Councils of the City of Pittsburgh a series of the canceled bonds of the city, representing the issues of comparatively recent years, were turned over to our custodianship; from Mr. Daniel Arnheim, through Mr. E. M. Bigelow, a powder-horn carved by

Wm. Mackenzie while a soldier in the garrison of Fort Pitt in 1783, giving upon its surface representations of portions of the fortifications as they then were. The Director has been unofficially informed that by joint resolution of the Senate and the House of Representatives of the United States certain historic cannon, now at the Allegheny Arsenal, will shortly be turned over to the custodianship of the Pennsylvania Society of the Sons of the American Revolution, with a view to having them deposited in the Museum. What steps may be taken in this connection the Director is not yet able to report, but the occasion of the transfer should be made a memorable one.

THE TRANSPORTATION EXHIBIT.

A considerable number of additions have been made to this exhibit and others are in process of preparation. The Director desires to add largely to the cases in which this interesting exhibit is displayed, space for which can be found in the hall room on the third floor. Mr. Wilson Banks has made a number of models based upon drawings kindly furnished by Dr. J. E. Watkins, of the Smithsonian Institution, Washington, and a number of specimens have been received as gifts, or loans. Mr. Mills has produced a number of very interesting models, not yet placed upon exhibition, showing the manner in which various animals are employed by man in transportation. These models are very well executed and promise to be of great interest, especially to the young.

CIRCULATING COLLECTIONS.

The circulating collections prepared at the Museum were much in use in the summer schools, carried on under the auspices of the Civic Club. They have also been loaned from time to time to various other organizations and to individuals who have utilized them for purposes of instruction. It is desirable to add to these collections, and we hope we may be able to do so in the near future.

PUBLICATIONS.

In my last report I called attention to the fact that we had at that time initiated the work of systematically publishing papers embodying the results of original investigation. The work has gone on during the past year with success, and we have been

able by means of the publications to initiate a system of exchanges with a number of the most important museums and scientific societies, not only in this country, but in various other parts of the world. It is gratifying to know that our publications have been recognized as of great value, having been most favorably reviewed in various scientific journals, and it is further pleasing to be able to report that some of the principal museums have of their own initiative requested us to place them upon our exchange list, offering, unsolicited, to supply us with what they may publish in return for that which we may be able to give them. Such requests have come to us from the Imperial Museum at Vienna, from the Royal Museum in Berlin, and from the British Museum in London. Recognition of this character so early in the life of the institution is gratifying. Through the medium of exchange we may hope gradually to add to our resources in the way of a reference library, and in the lapse of time to gather a collection of books and periodicals which will be of value.

THE MUSEUM LIBRARY.

A small sum was applied by the Director during the past year to the purchase of reference books which were needed, and we have received a number of valuable donations from various individuals. One of the most important of these donations was a set of the second edition of Audubon's great work upon the Birds of North America, kindly donated by Mrs. G. W. Hailman, of Pittsburgh. Through a small appropriation which the Director felt justified to make from the fund for paleontological research, a number of works absolutely needed by Mr. Hatcher in the prosecution of his work have been secured.

Our collection of books, while still small, is nevertheless valuable, and is a substantial nucleus upon which to build in coming years.

THE ANDREW CARNEGIE NATURALISTS' CLUB.

This vigorous organization still continues to flourish. Frequent meetings have been held during the year which have been well attended, and we are gradually, through this agency, noting a deepening and more intelligent interest on the part of the young people of the city in the work which is being carried on by the Museum. From among the bright lads and lasses who

take an active part in the work of the Club are certain to spring some whose names will hereafter be known in the annals of science. Most encouraging developments have been noted by the Director in this connection, but it would not be, for obviously proper reasons, right to call attention to those individuals around whom our hopes for future eminence in scientific research center. It suffices to say that in the membership of this Club are several young people, who, if they succeed in coming years as they are succeeding at present, will certainly find for themselves avenues of enduring usefulness in connection with museum administration and the prosecution of research.

THE PRIZE ESSAY CONTEST.

Another agency for creating an interest in scientific matters is the Prize Essay Contest, which was initiated seven years ago and which has continued year after year to deeply interest pupils in our public schools as well as their teachers. This contest has stimulated intelligent inquiry on the part of a multitude of young persons, and we feel that the time and money that have been expended in this connection have been well applied. As pointed out in previous reports, we are honored by imitation in this matter by many other institutions in this country and in Europe, and partly as the result of our initiative, we discover that a number of museums have taken up the problem of reaching and interesting the young people in the schools. The Director has received during the past year letters of inquiry from the heads of a number of museums asking for information in reference to our manner of conducting this contest, and otherwise stimulating the spirit of inquiry among the young.

OUR DEBT TO THE RAILWAYS.

The Director of the Museum cannot refrain from expressing a sense of the obligation which we owe in the conduct of the great work which has been before us during the past year to the various railways which have kindly aided us by furnishing free transportation to the members of our various expeditions sent into distant parts of the continent, and for kindly returning to the Museum without charge the collections that have been made. In this connection it is proper that I should mention kindnesses received from the officers of the Pennsylvania Railroad and the

Pennsylvania Lines West of Pittsburgh, through Mr. R. Pitcairn and Mr. James McCrea; from Mr. Marvin Hughitt, the President of the Chicago & Northwestern Railway Co.; from Mr. E. P. Ripley, President of The Atchison, Topeka & Santa Fe Railway Co.; from Mr. Horace G. Burt and Mr. A. G. Darlow, of the Union Pacific Railway Company; from Mr. Lucius Tuttle, President of the Boston & Maine Railway; from Mr. D. Pottinger, General Manager of the Intercolonial Railway Co.; and from Mr. H. D. Reid, Proprietor of the Newfoundland Railway, who kindly granted free transportation over his lines to the members of our expedition to Newfoundland, and also with signal generosity transported them free of any charge whatever from St. Johns, Newfoundland, to Labrador, and returned them on the line of steamers which plies in the summer and fall between St. Johns and the Labrador coast. To all these gentlemen who have shown their appreciation of the scientific work of the institution and who have so generously aided us, our most sincere thanks are tendered.

SUGGESTIONS AND PLANS FOR THE ENSUING YEAR.

Through the generous kindness of the founder of this institution our resources will be materially increased during the coming year. His gifts increase our responsibility for their wise and judicious application. In those branches of research to which we have already addressed ourselves, and to which it is hoped we shall be able in the coming year to devote ourselves to even better purpose than in the past, certain matters should particularly claim our attention.

The preservation of the collections which we have already amassed and which we shall continue to amass, demands the intelligent expenditure of a considerable sum of money in providing cases, not only for the display of specimens, but for their systematic storage and arrangement in such a way that they may be more conveniently accessible to students than they now are. This is particularly true of our collections in ornithology, conchology, entomology and mineralogy, and also to a certain extent in reference to our collections in the sections of ethnology and archæology. Unless something is done on lines which I will not weary you by setting forth, the best results cannot be achieved by those who are already members of our staff in working up these important collections.

It is proper to call attention to the growing necessity for card-cataloguing and permanently labeling much of the material that we already possess. It would be well if a small hand-printing press could be secured, with proper fonts of type, and the services of some one, not necessarily a high-priced laborer, could be secured to print for us labels which are required. To properly label the entire collection, as such collections are labeled in other museums, will necessitate the printing within the coming year of probably a hundred thousand labels. If we had such an arrangement, botanical, entomological and mineralogical labels, neat in appearance and easily legible, could be prepared as they are needed, and our collections would present a far more attractive and much neater appearance than they now do.

We have made a beginning in the work of publication, the results of which have been most encouraging. This work ought to be prosecuted with vigor. Scientific publications are of little value unless they be appropriately and fully illustrated. The largest item of expense in such publications is always that of illustration. This is shown to some extent by the financial statement herewith appended, in which the cost of illustration and publication incurred during the past year is set forth. One of our necessities is the employment of an artist who can draw representations of the various objects required by our force working in the section of paleontology and by those who are engaged in working up other collections. We should have at our command a fund for publication of not less than five thousand dollars annually. With this, while we could not attempt to vie with kindred institution which have much larger amounts at their command for purposes of publication, we nevertheless could maintain a creditable position among the greater museums of the world.

It is also desirable that we should have it in our power from time to time to acquire collections which are thrown upon the market through the death of the owner or for other reasons, which will supplement and increase the value of collections which we already have secured.

But even more important than what I have already pointed out is the necessity for adding in the immediate future to our staff a number of men of positive scientific ability, who shall devote themselves to the work of organization and research in those departments of inquiry which we have already entered, or

which stand before us with open doors inviting our entrance. So soon as possible there should be secured for this Museum the services of a curator of recent vertebrates who will bring to his task the scientific knowledge and the energy which are required. The section of archæology and ethnology needs the services of an expert. We also need the services of a competent preparator to assist Mr. Webster in the work of his laboratory, and the services of a preparator in osteology, and in entomology, as has been already pointed out in this and previous reports. If such additions could be made to our working force the results of our labors would not be merely doubled, but by the utilization of resources already in our possession in the way of active workers, the results would be trebled—not merely in the amassment of new material, but in the systematic ordering and the utilization for scientific purposes of that which we already possess. I cannot lay too much emphasis upon the need which there is for the services of first-class men possessing the necessary knowledge and directive capacity to secure from existing opportunities the highest results. It may be said in passing that such men will not only be useful to the department over which I have the honor of presiding, but that in the future, when the Department of Technological Instruction is matured, their services will also be most valuable in that sphere of work. One of the gentlemen now with us has been the Professor of Geology in one of the leading universities of America; others whom I should like to have the authority to add to the staff will be drawn from equally important positions elsewhere.

FINANCIAL STATEMENT

OF THE

CARNEGIE MUSEUM, PITTSBURGH, PENN'A.

April 1st, 1901—April 1st, 1902.

GENERAL FUND.

RECEIPTS.

1901.			
April 1.	To Balance on hand	$	20.93
" 14.	" Refund of Freight		8.84
" 15.	" Annual Appropriaton		25,000.00
May 1.	" Refund of Freight, etc		7.09
" 16.	" Cash from Sale of Entomological Supplies		2.46
July 26.	" Do. Do.		1.00
" 29.	" Do. Do.		6.96
Nov. 11.	" Do. Do.		2.15
" 11.	" Cash Refunded by W. E. C. Todd		18.96
" 20.	" Cash from Sale of Photographs		7.50
Dec. 31.	" Cash Refunded by W. J. Holland, account Long Distance Telephone Mes-		
1902.	sages		13.00
Feb. 1.	" Cash from State Normal School, Greeley, Col., account Entomological Supplies		14.95
	Total	$	25,103.84

DISBURSEMENTS.

Salaries	$13,375.46
Labor	.75
Traveling Expenses	84.35
Books and Periodicals	293.49
Binding Books	41.75
Office Furniture	13.00
Stationery and Office Supplies	116.61
Postage and Telegrams	200.50
Packing and Unpacking	1.85
Freight and Expressage	620.30
Exhibition Cases	3,442.01
Alcohol, Drugs, etc.	105.96
Boxes and Trays	167.79
Printing Labels	50.70
Applied to Publication Fund	504.83
Photographs	.50
Frames for Pictures	47.75
Laboratory Fixtures	27.67
Laboratory Supplies	105.36
Purchase of Collections	4,805.10
Prize Essay Contest	302.37
Incidentals	15.70
Photographic Supplies	2.36
Tools	65.68
Telephone	136.65
Storage (rental)	25.00
Cost of Shed to Store Ancient Egyptian Boat	294.57
Repairs to Cases	4.41
Ammunition and Collecting Material	58.55
Dues as Member of Museums' Association	5.11
Herbarium Supplies	147.00
Insect Pins	25.62
Total	$25,088.75
Balance on hand	15.09
	$25,103.84

PUBLICATION FUND.

DR.

April 1, 1901:—		
To Balance on hand, appropriated 1900	$	600.00
March 31, 1902:—		
To Cash received at sundry times from the General Fund and applied to the payment of Bills for Account of Publication		504.83
" Cash appropriated by the Director at sundry times from the Fund for Paleontological Research, to defray cost of publications relating to Paleontology		644.79
" Cash received at sundry times from the Sale of Publications		41.81
Total	$	1,791.43

CR.

March 31, 1902:—		
By Expended for Services of Artists to prepare drawings for Vol. I, Parts 1-3, of Annals, and Memoirs Nos. 1 and 2	$	377.85
" Paid Engravers for making Plates and Cuts from Drawings and Photographs for Annals and Memoirs		295.08
" Paid Engravers for Cuts to illustrate Annual Report of 1901		17.60
" Paid Engravers for Cuts to illustrate Report of Prize Essay Contest for 1900		12.18
" Paid New Era Printing Co. for printing 1,000 copies Annals, Pts. 1 and 2, and 600 copies Memoir No. 1		818.60
" Paid Murdoch, Kerr & Co. for printing Report for 1900 on Prize Essay Contest (1,000 copies)		97.00
" Paid Murdoch, Kerr & Co. for printing Annual Report of Director for 1901 (1,000 copies)		135.00
" Paid for Envelopes to mail Memoirs		8.00
" Refunded to Fund for Paleontological Research from Sale of Paleontological Papers		27.63
Total		$1,788.94
" Balance, Cash on hand in Citizen's National Bank		2.49
Total		$1,791.43

STATEMENT OF THE CONDITION OF THE SPECIAL FUND PROVIDED BY MR. ANDREW CARNEGIE FOR PALEONTOLOGICAL RESEARCH.

DR.

April 1,1901:—		
To	Balance on hand	$8,386.34
"	Interest on Daily Balances	75.05
"	Refunded by Publication Fund	27.63
"	Freight refunded	162.00
"	Cash from Sale of Team and Harness	194.03
"	Cash from Peabody Museum, Yale University, for Casts of Foot of Brontosaurus	35.00
"	Cash received from Mr. Andrew Carnegie	10,000.00
	Total	$18,880.05

CR.

By	Salaries	$4,970.50
"	Expenses incurred in conducting Three Exploring Expeditions in the Rocky Mountains, from April—October, 1901	2,897.29
"	Sundry Laboratory Expenses	256.65
"	Freight	162.00
"	Expressage and Hauling	39.10
"	Exhibition Case	637.00
"	Office Furniture (Card Catalogue)	13.50
"	Office Supplies (Stationery, etc.)	22.75
"	Postage and Telegrams	4.50
"	Tools in Laboratory	34.41
"	Cost of Storage Cabinets	95.53
"	Applied to Publications	644.79
"	Books of Reference	510.98
	Total	$10,289.00
	Balance	8,591.05
		$18,880.05

REPORT OF THE SECRETARY

OF THE

PITTSBURGH BRANCH OF THE EGYPT EXPLORATION FUND.

The Secretary of the Pittsburgh Branch of the Egypt Exploration Fund gladly desires to acknowledge the hearty co-operation with which the officials of the Carnegie Museum have aided in the work of the Fund. It has been, indeed, much more than co-operation, the Director of the Museum and his assistant, Mr. Stewart, have been the head and front of the whole enterprise, and the relation of the Secretary of the Pittsburgh Branch to the actual work done has been for the most part that of accessory after the fact.

The Pittsburgh Branch was organized some three years ago with the double purpose of aiding in the scientific exploration of the ruins of Egypt, and of securing for the Carnegie Museum as great a share as possible of the results of that exploration. Until last year the annual subscriptions to the Fund sent in from Pittsburgh to the London office did not exceed three hundred and fifty dollars. The objects received in return for these subscriptions, interesting and valuable as they are, did not form a conspicuous part of the varied treasures of the Museum.

Last year, however, chiefly through the activity of Dr. Holland, this small subscription was increased seven-fold, as is shown by the accompanying financial statement; and we have the double satisfaction of knowing, on the one hand, that the Carnegie Museum, through the local branch of the Egypt Exploration Fund, has been an appreciable factor in a work that is steadily pushing outward the bounds of human knowledge; and, on the other hand, that the Museum itself has this year been enriched through the acquisition of a varied assortment of objects, valuable alike for their human interest and their historical sig-

nificance. The list of these objects, arranged by Mr. Stewart and given herewith, shows that they represent three of the most significant and interesting periods of Egyptian history, namely, the pre-dynastic "cultures," and the beginning of the monarchy under the kings of the first dynasty; the period of Egypt's widest empire and richest life in the eighteenth and nineteenth dynasties; and the centuries stretching from Alexander's conqust to the Mohammedan invasion, during which the Nile valley was the home of one of the most interesting phases of Graeco-Roman civilization.

A private view of these antiquities was given in the Lecture Hall of the Museum on the evening of March 18th. The objects, carefully arranged and labeled, were examined with much interest by a good number of the subscribers and their friends. The three brief addresses which were made served to explain in some degree the nature and value of the more important objects, and to indicate their place in the movement of Egyptian history.

About one-fourth of the total amount subscribed by the Pittsburgh Branch last year was devoted to a special purpose, viz.: the discovery and preservation of the papyri, which form the most valuable remains of the Graeco-Roman Period. None of these are included in the list of the objects received this year, but the Secretary is in receipt of a letter from the Honorary Secretary of the Fund in London intimating that this arises from the fact that papyri cannot be distributed until they have been carefully worked through, a process necessarily requiring much time, and in due course we shall receive our just share in this department, as in the others.

At the last annual meeting of the Fund, held in London on November 7th, 1901, Prof. Petrie announced that the next three years would be spent in the excavation of the great temple site of Abydos. He enters upon this field in the conviction that it is the most promising site of all Egypt. This gives us reason to hope that the acquisitions of coming years will be at least as valuable as those already received, and that the growth in this department of the Museum will thus keep pace with the development of the institution as a whole.

WILLIAM R. FARMER,
(Secretary of the Pittsburgh Branch.)

PITTSBURGH BRANCH.

SUBSCRIPTIONS TO THE

EGYPT EXPLORATION FUND.

Received from August 1, 1900, to August 1, 1901.

W. L. Abbott	$ 25.00	G. M. Laughlin	25.00
Dr. Maitland Alexander	10.00	Jas. H. Lockhart	25.00
Ralph Baggaley	25.00	F. T. F. Lovejoy	25.00
David R. Breed	5.00	Jno. R. McGinley	25.00
W. W. Blackburn	25.00	Mrs. Jas. R. Mellon	25.00
H. P. Bope	15.00	C. C. Mellor	25.00
A. M. Brown	15.00	Jno. F. Miller	5.00
James I. Buchanan	25.00	Jno. Moorhead, Jr.	25.00
John Caldwell	25.00	A. M. Moreland	25.00
Mrs. Andrew Carnegie	25.00	F. F. Nicola	25.00
Mrs. George L. Carnegie	50.00	George T. Oliver	25.00
T. M. Carnegie	100.00	Jas. B. Oliver	25.00
George H. Clapp	5.00	E. M. O'Neill	25.00
Samuel A. Crozer	25.00	Chas. P. Orr	10.00
A. Dempster	5.00	Henry Phipps	25.00
Miss Matilda W. Denny	25.00	Lawrence C. Phipps	25.00
Edward T. Dravo	5.00	H. K. Porter	5.00
Horace G. Dravo	5.00	Hon. Jno. D. Shafer	10.00
Rev. Wm. R. Farmer	5.00	Lee S. Smith	10.00
Henry C. Frick	500.00	Chas. E. Speer	50.00
James Gayley	25.00	Douglas Stewart	10.00
Mrs. Hermon Griffin	5.00	Mrs. D. A. Stewart	5.00
George R. Harlow	5.00	Chas. L. Taylor	25.00
James H. Harlow	5.00	B. Thaw	25.00
H. J. Heinz	10.00	J. C. Thaw	25.00
John G. Holmes	25.00	Mrs. Wm. R. Thompson	25.00
Durbin Horne	25.00	Richard G. Wood	25.00
D. Herbert Hostetter	25.00	Thos. D. Wood	25.00
John B. Jackson	25.00	Carnegie Library	12.50
B. F. Jones	25.00	Western Theo. Seminary	5.00
Wm. D. King	10.00		
Geo. Lauder	100.00		$1,827.50

ARCHÆOLOGICAL SURVEY.

From August 1, 1900, to August 1, 1901.

Miss Matilda W. Denny..	$ 5.00
John B. Jackson..	5.00
Henry Phipps..	25.00
H. K. Porter..	5.00
Carnegie Library..	10.00
	$ 50.00

GRÆCO-ROMAN BRANCH.

Geo. R. Harlow..	$ 5.00
John F. Miller..	5.00
H. K. Porter..	5.00
Prof. M. B. Riddle..	5.00
J. L. Schwartz..	5.00
Carnegie Library..	5.00
	$ 30.00

GRÆCO-ROMAN BRANCH.

(Special Papyrus Fund.)

Samuel A. Crozer..	$ 50.00
W. J. Holland..	25.00
John G. Holmes..	25.00
Jas B. Oliver..	25.00
Jas. H. Park..	25.00
Henry Phipps..	250.00
Lawrence C. Phipps.. ..	75.00
Douglas Stewart..	25.00
Richard G. Wood..	25.00
Thomas D. Wood..	25.00
	$ 550.00

Totals applied to General Fund..	$1,827.50
" " Archæological Survey..	50.00
" " Græco-Roman Branch..	30.00
" " Do., Special Papyrus Fund..	550.00
	$2,457.50

EGYPT EXPLORATION FUND—OBJECTS SENT TO PITTSBURGH.

(Carnegie Museum, Acc. 1917 & 1948)

See Report of Accession Officer.

Cylinder jar of King Ka. Abydos. Tomb of Ka. (Broken.)
Piece of cylinder jar of King Ka. Abydos. Tomb of Ka. Pre-dynastic.
Gold pin, tomb of King Zer. I. Dyn. Abydos.
Set of five colored lantern slides of the bracelets found on arm of queen, tomb of King Zer, I. Dyn. Abydos.
Alabaster vase of King Zer, I. Dyn.; large, fine.
Alabaster jar, tomb of King Zer, I. Dyn.; much weathered.
Alabaster jar, probably same; no label.
Nine ivory arrow-heads, tomb of Zer, I. Dyn. Abydos.
Sycamore figure, tomb of Zer, I. Dyn. Abydos.
Ivory wand of Zer, I. Dyn. Abydos. (Fine.)
Copper chisel, tomb of Zer, I. Dyn. Abydos.
Copper needles, tomb of Den, I. Dyn. Abydos.
Fragments of marble bowl of King Qa, tomb of Qa, I. Dyn., with inscription.
Pieces of ivory inlay, tomb of Qa,, I. Dyn. Abydos. 3 spex.
Two ivory labels, tomb of Mena, I. Dyn. Abydos.
Two flint arrow-heads, tomb of Mena, I. Dyn. Abydos.

Fragments of carved ivory, tomb of Den, I. Dyn. Abydos.
Two copper chisels, tomb of Den, I. Dyn. Abydos. (Good.)
Piece of blackened ivory tablet of King Den, I. Dyn. Abydos.
Copper nails (3 spex), tomb of King Mersekha, I. Dyn. Abydos.
Fan handle, ivory, broken, with names of Aha-Mena and Benerab. Tomb of Benerab, I. Dyn. Abydos.
Feldspar bowl of King Khasekhemui, II. Dyn. (Fine condition.)
Marble jar, gold top, tomb of Khasekhemui, II. Dyn. Abydos.
Copper bowl, tomb of Khasekhemui, II. Dyn. Abydos.
Ten models of tools (bronze). Abydos. Tomb of Khasekhemui, II. Dynasty.
Clay "sealings" of Perabsen and Khasekhemui, II. Dyn. Abydos. (10 spex.)
White syenite bowl (jar?), tomb of Khasekhemui, II. Dyn.
Painted vase, shrine of Osiris. Abydos. XVIII. Dyn.

D 64 A. XVIII. DYNASTY. ABYDOS.

Double alabaster vase, small, imperfect.
Lid of alabaster kohl pot.
Bronze spear-head.
Ebony kohl stick.
Piece of small stela.
Large blue glaze, button-shaped beads.
Glaze scarab.
Glaze "evil eye" amulet.
Gold foil.

D 64 B. ABYDOS. XVIII. DYNASTY.

Small stelæ.
Double Phœnician pot (broken).
Glaze scarab.
Broken sculptured slab.
Lid of kohl pot (broken).
Glaze and carnelian beads—one gold bead.
Bronze kohl-stick.

D III-XVIII. DYNASTY.

Broken glaze dish, one piece wanting.
Carnelian necklace.
Glaze and shell necklace, with two amulets.
Two glaze necklaces.
Six amethyst beads.
Double wooden kohl pot, with ivory top (very good).
Glaze scarab and plaque of Thothmes III.
Glaze swan with name Ra-morg. (Good.)
Three glaze scarabs.
Two circular amulets.
Fragments of ivory from inlay.
Wooden and pottery pegs.

Two bronze hooks.
Fragments of gold-leaf.
Pottery dish.
Small pottery jar. (Broken.)
Pottery vase.

D 66. XII-XVIII. DYNASTY. ABYDOS.

Twenty-three strips of ivory.
Glaze beads—amulet, 1 carnelian bead. (Poor lot.)
Two kohl pots with covers. (Good.)
Minute alabaster vase.

D 71. I. DYNASTY. ABYDOS.

a. Glaze lion, partially covered with gold foil, cartouche on bottom.
b. Glaze scarab.
c. Few glaze beads.
d. Glaze fly amulet.
e. Pendant carnelian.
f. 1 wood, 1 wood and ivory, and 1 stone eye from coffin.
g. Bronze pin.
h. Wooden kohl stick.
i. Broken lid of kohl pot, serpentine.
j. Lot of beads, unstrung, about 20.

D 73. XII. DYNASTY. ABYDOS.

String of blue glaze beads, round, good condition, with broken stone scarab.

D 79. XII-XVIII. DYNASTY. ABYDOS.

Two strings of blue glazed beads.

D 87. XV-XVIII. DYNASTY. ABYDOS.

Two "blue" marble kohl pots, without lids.
Two bronze rings, one of which is gold plated.
Two stone eyes from coffins.
Two carnelian, one glass, several glaze and shell beads.
One pair bronze tweezers.
Seven pieces of pottery similar to D 116.

D 92. XVIII. DYNASTY. ABYDOS.

Alabaster kohl pot, without cover (broken en route).
Copper ring.
Four strings of glaze beads.
Stone feet of figurine, name iwf-senb.
Alabaster kohl pot, with cover slightly broken.
Fragment of female figurine showing tattoo marks.

D 98. XX-XXV. DYNASTY. ABYDOS.

Two bronze spear-heads (fine).

D 102. XVIII. DYNASTY.

Six ivory fragments.
Copper handle for tool.
Two boxes of ivory fragments.
Four strings of beads.
Five strings of beads. (Fine.)
One alabaster vase (small).
Seven gold ear-rings.
Two silver ear-rings.
Two silver rings.
One silver ring with scarab.
Seven bronze fish-hooks.
Forty-five scarabs, plaques, etc. (two scarabs mounted in gold (?) bands).
String of blue glaze beads.
Six shells on string.
One razor.
Kohl stick.
One copper instrument.
One copper hook.
Fragment of a pottery vase.
Blue pottery dish (cracked, has been repaired).
Copper nail.
Blue glaze amulet.
Forty-nine pieces of pottery (one large jar broken, pieces sent).
One fragment of pottery.
Four "polishing" stones.
Four alabaster kohl pots.
One alabaster vase (small).

D 116. XVIII. DYNASTY. ABYDOS.

Three labaster vases, small, fine condition.
Two alabaster kohl pots.
Wooden spoon.
Tortoise shell comb.
Five fragments of ivory.
Bronze dish, and pitcher-like vase. (Good.)
Fourteen pieces of pottery, mostly small, but some in good condition.
Alabaster cup.
Fragment of alabaster dish.
Alabaster kohl pot.
Stone kohl pot.
Small alabaster jar.
Broken ivory bracelet.
Two ivory wands.
Double ivory kohl pot.
Tortoise-shell lid and comb.
Blue glaze vase (perfect).
Triple wooden kohl pot (carved) and three bronze kohl sticks.

Two kohl pots, carved monkeys, blackened limestone. (Fine.)
Three bronze mirrors.
Two bronze axes.
Bronze razor.
Bronze kohl stick.
Alabaster lid.
Ten strings of beads.
Two scarabs, Thothmes III. (in paper).
Glaze face—plaque.
Fifteen scarabs.
One plaque.
One scarab, Hatshepsu.
Blackened limestone button.
Glaze bird figure, amulet.
One large gold ear-ring.
Four small gold ear-rings.
One gold bead.
Fragments gold foil.
Fragment of coral.
Box of kohl.
Two bronze rivets.
Bronze fish-hook.
Bronze chisel.
Four blue glaze pendants.
Piece of alabaster.
Piece of lead.
Lead ore (1 spec.), small.
Ten pieces of pottery.

D 119. XVIII. DYNASTY. ABYDOS.

Two large alabaster vases. (Fine.)
Alabaster cup with handle, imitated from metal work.
Three alabaster kohl pots. (Good.)
Limestone kohl pot. (Blackened.)
Limestone kohl pot, monkey carving. (Fine.)
Small clay doll.
Two small plaster masks.
Two pairs bronze tweezers.
Two glaze plaques (Thothmes III.).
One carnelian scarab.
Seven glaze plaques and scarabs.
Small lot of glaze and carnelian beads.
Sandstone hone.
Wooden comb.
Bronze cylinder from a handle.
Small box of ivory inlay from a box.
Fragments of gold foil.
Small wooden kohl tube.

Two stone eyes from coffin.
Nine lead sinkers.
Twenty-three pieces of pottery, including one exceptionally fine vase. (As a whole good.)
Two much weathered alabaster vases.
Four lead net sinkers.

D 119. SMALL TOMB.

Two pieces of very rude pottery.

Ushabti of Thephia, from Osiris' shrine, tomb of Zer, XVIII. Dynasty. Colored; fine.

Sarcophagus Cover—Priestess of Khentamenti—Mehtdusnekht—born of the priestess of Khentamenti Ast Urt, daughter of the Osirian, the **heska,** Prophet of Bastet in Abydos. Hor. XXX. Dynasty.

EGYPTIAN COLLECTIONS. SECOND CONSIGNMENT.

1. Cartonnage head from a mummy case. Found at Rubayyât. Ptolemaic period.

2. Cartonnage breast piece from a mummy case. Found at Rubayyât. Ptolemaic period.

   "Cartonnage" is usually made of canvas covered with stucco and then painted and gilded. Prof. Petrie when working in the Fayûm made the great discovery that in the Ptolemaic period waste papyri were commonly used instead of canvas. By this means many fragments of ancient Greek authors have been preserved.

3. Bronze incense burner. Found at Kasr el Banât. (See Fayûm Towns, p. 45.) Ptolemaic period.

   This incense burner is a fine specimen of the bronze-work of the period. Incense burners are not often found. This one is not quite perfect, the piece which joins the hand to the rest of the tube having been anciently broken off and lost. The incense was burned in the little pot which stood on the hand, the stock of incense was kept in the little box half-way along the tube.

4. Iron saw in wooden handle. Found at Kasr el Banât. Roman period. (See Fayûm Towns, p. 47, Pl. XV., 3.)

   In Fayûm Towns it is called a knife, but the serrated edge shows that it is undoubtedly a saw.

5-7. Reed pens (3). Found in the Fayûm. Probably Ptolemaic period.

   These are the pens used throughout Egypt for all writing purposes.

8. Alabaster fragment of vase. Delicately carved with a wing.
The design was in all probability the winged *Disk*, emblematic of protection.

9. Pottery handle of amphora. Found at Umm-el-'Atl. Roman period. (See Fayûm Towns, p. 37.) Stamped with a Latin (?) name.

10. Mummy label with incised Greek letters. Wooden labels with the name of the deceased were often tied on mummies.
This custom is first known in the XVIIIth Dynasty and continued until Roman times.

11. Musical instrument. Found at Umm el 'Atl. Ptolemaic period.

12. Fine black pottery vase. Found at Rubayyât. Ptolemaic period.
A very fine specimen of its kind.

13. Wooden lock with sliding bolt. Found at Kasr el Banât. Late Ptolemaic period. (See Fayûm Towns, p. 46, Pl. XVI., 6.)
Many wooden locks were found both at Kasr el Banât and at Umm el 'Atl. This is the most perfect one found.

14. Iron door-key with wooden handle. Found at Umm el 'Atl. Late Ptolemaic period.
Though this key does not fit the lock, yet it shows the kind of latch-key in use at that period.

15. Beads (marked R. 71). Found at Rubayyât. Ptolemaic period.
These beads are made of glazed pottery or faience.

16. Bronzed and bead earring (marked R. 69). Found at Rubayyât. Ptolemaic period.

17. Wooden bowl. Found at Umm el 'Atl. Ptolemaic period. (See Fayûm Towns, p. 39.)
One of the household utensils of the time. Among the villages wood and pottery appear to have been the only materials for household objects; metal and stone being rarely found.

18. Wooden stand. Found at Kasr el Banât. Roman period.
From its size this is probably a child's toy.

19. Wax-tablet for writing. Found at Umm el 'Atl. Ptolemaic period.
Wax-tablets were commonly used and were written upon with an iron stylus.

20. Head of snake, painted wood. Found at Umm el 'Atl. Probably Roman period. (See Fayûm Towns, p. 38.)
The cobra was the emblem of goddesses, and the painted effigy was placed beside the bier to afford protection to the dead.

21. Terra cotta figure (marked R. 153). Found at Rubayyât. Late Ptolemaic period.
Terra cotta figures are not uncommon in the late Ptolemaic and Roman times.

22. Amulet in the shape of a heart of blue faience. Found in the temple at Kom Ushîm. (See Fayûm Towns, p. 30.) Probably Roman period.

23. Lamp of yellow clay. Found at Kom Ushim. (See Fayûm Towns, p. 29.) Roman period.

This is an unused lamp and was probably one of the stock in a local store.

24. Lamp. Found at Kasr el Banât. (See Fayûm Towns, p. 57, pl. XVI., 13.) Roman period.

25. Pair of papyrus sandals (marked R. 159). Found at Rubayyât. Roman period.

These sandals are new and unworn, and were placed in the tomb for the use of the dead in the next world.

26. Tube with stopper. Found at Rubayyât. Third or second century B. C.

27. Wooden carding comb. Found in the Fayûm. Roman period.

Probably a comb for carding wool. It is ornamented with concentric circles.

28. Mallet, wood. Found at Kasr el Banât. Ptolemaic period. (See Fayûm Towns, p. 46, pl. XV. 12.)

29. Box, wood. Found in the Fayûm. Probably Roman period.

Observe the dove-tailing of the sides.

30. Stamp, wood. Inscribed with the name TPAIANOY reversed.

31. Painted panel. Found at Umm el 'Atl. Ptolemaic period.

Painted with representations of the Crouching Hawk (emblem of Sokaris, god of the Resurrection) and of the jackal god, Upuat (one of the gods of the Dead). The hieroglyphics read, "Up-uat of the South, leader of the Two Lands."

32. Inscribed potsherd. Found at Kasr el Banât. Roman period.

When papyrus grew scarce potsherds and smooth pieces of limestone were used for writing domestic accounts and other small matters for which papyrus was too expensive.

33. Circular wooden box. Found at Kôm Ushûm. (See Fayûm Towns, p. 29.) Roman period.

From the number of these little objects, and from the fineness of the work on some of them, it seems probable that they are articles for the toilet.

34. Stone weight. Found at Kasr el Banât. Roman period.

Stone weights are found in Egypt from quite early times.

35. Pottery saucer (marked D. 9). Found at Dimeh. Ptolemaic period.

36. Pottery jug (marked Y). Found at Yakuta. Ptolemaic period.

37. Pottery bowl (marked H 4 [b]). Found at Harît. Probably Ptolemaic period.

38. Limestone jar. Found in the Fayûm. Probably Ptolemaic period.

39. Marble jar. Found in the Fayûm. Probably Ptolemaic period.

40. Saucer, green faience. Found in the Fayûm. Ptolemaic period.

Faience, or glazed ware, is known in Egypt from the earliest times. It degenerated, as did all other forms of art in Egypt under Greek and Roman influence. It is instructive to compare the glaze and color of this late piece of faience with those of the objects from Deir el Bahari (See below).

41. Bar of balance, bronze. Found in the Fayûm. Probably Ptolemaic.

42. Saucer, bronze. Found in the Fayûm. Probably Ptolemaic.

43. Vessel, horn (marked R 57). Found at Rubayyât. 3d or 2d century B. C.

44. Statuette, wood (marked H 286). Found at Harît. Probably Roman period.

45. Bowl, blue faience. Found at Kom Ushim. Ptolemaic period.

A good specimen of the color and glaze of the time.

46. Jar, marble. Found in the Fayûm. Probably Roman period.

47. Bracelet, bronze. Found at Kasr el Barnât. Roman period.

48. Ring, black glass (broken). Found in the Fayûm. Probably Roman period.

All the objects catalogued above were found in the Fayûm by Messrs. Grenfell, Hunt, and Hogarth during the winters of 1895-6, 1898-99, 1900-01.

The objects from Deir el Bahari were excavated by M. Naville. They are of the XVIII. Dynasty.

49. Ball, blue and black faience.

Apparently a child's toy, or perhaps used in some game for adults.

50. Cow's head, faience.

The cow was sacred to the goddess Hathor.

51. Amulet in shape of a carbuncle.

This cartouche contains the throne name of King Thothmes III., "Men-Kheper-Ra." On the reverse is the epithet, "Beloved of the god Amen."

52. Beads, blue faience.

These show the characteristic "Deir el Bahari blue."

The prehistoric pottery and slate palettes were found by Prof. Flinders Petrie at Neqada and Hu in Upper Egypt.

Slate Palettes (6).

These palettes were used for grinding malachite for use as eye-paint. Many palettes show the hollow caused by rubbing down the paint.

Prehistoric pottery (12), glazed, red, and black.

All these pots are shaped by hand, the potter's wheel not being invented then. The red glaze is made of a wash of ground hæmatite; the black is the hæmatite oxydized by the fire in which the pots were baked.

COINS.

Claudius.. 6
Nero,.. 36
Galba,.. 5
Otho,.. 3
Vitellius,.. 1
Vespasian,.. 5
Nerva,.. 1
Hadrian,.. 10

A large hoard of coins was dug out of a cellar of a house at Umm el 'Atl. In this one hoard there were more than four thousand coins contained in three large jars.

REPORT OF THE ACCESSION OFFICER.

DR. W. J. HOLLAND,
Director of Carnegie Museum,
Pittsburgh, Penna.

I have the pleasure to submit herewith my report as Accession Officer for the fiscal year just closed.

The accessions to all sections of the Museum during this time were:

Permanent accessions	264
Accessions to the Museum Library	183
Accessions by loan	9

The large number of objects contained in many of the accessions, especially these in sections that are not fully organized and consequently not promptly classified, makes it impossible at this time to give an accurate estimate of the gross number of objects comprised in the year's accumulations. The accessions to the Museum library have increased considerably owing to the exchanges secured by our publications. The loans have materially decreased on account of the general lack of space in our present crowded quarters available for such collections.

As heretofore the alphabetical sequence is observed in the detailed lists of the following pages.

Very respectfully,

J. A. SHAFER,
Accession Officer.

March 31, 1902.

PERMANENT ACCESSIONS TO THE CARNEGIE MUSEUM,

April 1, 1901, to April 1, 1902.

Unless otherwise stated the objects have been donated.

Anderson, Charles A., Pittsburgh. Grey parrot, in flesh. (Skin made.) June 21, 1901.. .. .. (1779)

Arnheim, Daniel, Pittsburgh. Powder-horn, engraved by William Mackenzie while in garrison at Fort Pitt in 1783. Oct. 14, 1901..(1873)

Ashe, W. W., Raleigh, N. C. Twenty-seven specimens of Cratægus, mostly cotypes of species of which the donor is the author. Feb. 10, 1902.. .. .. (1949)

Atkinson, Dr. D. A., Wilkinsburg, Pa. Labradorite, collected at Nain, Labrador, Sept. 30, 1901... .. .. (1847)
Two wood turtles, Allegheny County. Oct. 2, 1901.. .. .. (1857)

Baker, Henry, Yarmouth, Nova Scotia. Five birds from Nova Scotia. March 3, 1902... .. .. (1962)

Banks, Joseph G., Pittsburgh, Pa. Chestnut pin taken from Fort Pitt, June 10, 1854. June 12, 1901... .. .. (1778)

Becker, Fred E., Pittsburgh. Two-headed calf, mounted; born at Hagerstown, Md., 1840. June 26, 1901... .. .. (1792)

Beecher, Dr. C. E., Yale Museum, New Haven, Conn. Collection of invertebrate fossils, consisting of 76 specimens, representing 17 genera and 19 species, chiefly from the Hamilton group in New York State. Exchange. Dec. 3, 1901... .. .. (1911)

Belnap, R. M., Pittsburgh. Five specimens of oil rock, Beaver County, Pa. May 18, 1901... .. .. (1767)

Bergman, J. M., Edgecliff, Pa. Impression of *Lepidodendron*. July 22, 1901... .. .. (1808)

Brown, Thos. S., Pittsburgh. Two medals: (1) Presented to delegates, S. A. R., Pittsburgh Convention, 30th April-1st May, 1901; (2) Presented to visitors, S. A. R., Pittsburg Convention, 30th April-1st May, 1901. June 1, 1901... .. .. (1775)

Cameron, Roderic, Niagara Falls, Ontario, Canada. Photograph of a double flowering Trillium found at Niagara Glen, Queen Victoria Park, Ontario. October 15, 1901.. .. .. (1875)

Carnegie, Andrew. Ancient Egyptian boat. Sept. 30, 1901.. .. .. .. (1842)

Carnegie, Andrew, Fossil Fund. *Philidophorus americanus* Eastman, from Jurassic deposits near Hot Springs, South Dakota—three almost complete skeletons, collected by J. B. Hatcher.. .. .. (1853)
Jurassic fresh-water invertebrates, from Canyon City, Colorado, collected by J. B. Hatcher.. .. .. (1855)
Small collection of vertebrate fossils, from Sioux City, Nebraska, by O. A. Peterson.. .. .. (1865)
Vertebrate fossils, collected by O. A. Peterson—46 boxes.. (1869)
Fossils and minerals, collected by J. B. Hatcher in Nebraska and South Dakota—6 boxes.. .. .. (1870)
Vertebrate fossils from the Jurassic of Sheep Creek, Wyoming, collected by C. W. Gilmore—50 boxes.. .. .. (1885)
Vertebrate fossils from the Jurassic of Colorado, collected by W. H. Utterback—26 cases.. .. .. (1934)

CARNEGIE MUSEUM STAFF.

Atkinson, Dr. D. A. (See Expedition to Northeastern America.)

Banks, Wilson. Models made in the Museum laboratories: Two cars and two coaches, as first used on Penna. R. R.; two coaches, as first used on Mohawk and Hudson River R. R. March 31, 1902.. (2003)

Banks, Wilson, and Theodore A. Mills. Miniature models, made in the Museum laboratories: Eskimo, sled and dogs; Laplander, sled and reindeer. March 31, 1902.. .. .. (2004)

Expedition to Northeastern America. (Messrs, Todd, Atkinson and Mellor.) Crustacea.. .. .. (1780)
Lepidoptera.. .. .. (1781)
Mollusca.. .. .. (1782)
Reptilia.. .. .. (1783)
Batrachia.. .. .. (1784)
Mammalia.. .. .. (1785)
From New Brunswick: Plants.. .. .. (1825)
Insecta.. .. .. (1824)
Mollusca.. .. .. (1826)
Birds' nests and eggs.. .. .. (1827)
From Magdalen Islands: Plants.. .. .. (1909)
Mammals.. .. .. (1982)
From Newfoundland and Labrador; Birds from New Brunswick, Nova Scotia, Magdalen Islands, Newfoundland, and Labrador, approximating six hundred skins.. .. .. (1983, 1984)

Gilmore, C. W. (See Andrew Carnegie Fossil Fund.)

Hatcher, J. B. (See Andrew Carnegie Fossil Fund.)

Holland, W. J. Small collection of miscellaneous insects, collected in Wasington County, Pa., July 9, 1901. July 22, 1901.. .. .. (1797)
Shed skin of snake, found at Gray's Distillery, Greene Co., Pa. July 22, 1901... .. .. (1798)

Holland, W. J., and Mills, Theodore A. Relief maps of Fort Duquesne and Fort Pitt (two of each). Modeled in the Museum laboratories. March 31, 1902... .. .. (2001)

Mellor, George E. (See Expedition to Northeastern America.)

Mills, Theodore A. Life-sized figure—Zuni Bride, exhibiting parts of Acc. 1683. Nov. 5, 1901.. .. .. (1882)
Miniature models, made in the Museum laboratories: Zuni water-bearer; Peruvian carrier; Carolina negress; Canal lock; camel caravan; elephant with howdah. March 31, 1902.. .. .. (2002)

Peterson, O. A. (See Andrew Carnegie Fossil Fund.)

Shafer, J. A. Plants collected in Western Pennsylvania, mostly Allegheny and Fayette Counties, April, May and June, 1901. June 29, 1901. .. ..

CARNEGIE MUSEUM PURCHASES.

Bacon, Samuel E., Erie, Pa. Birds from Erie, Pa., 14 species, 38 specimens... .. ..(1755, 1849, 1863, 1878, 1883, 1908, 1922)

Burnett, L. E., Loveland, Col. Sage chickens (17 specimens), in marital plumage. July 29, 1901... .. ..(1822)

Conyers, Mrs. Kate, Pittsburgh. Apache Indian saddle-bags, from member of Geronimo's band. May 23, 1901... .. ..(1773)

Eaton, Howard, Pittsburgh. Zuni and Navajo Indian costumes... .. ..(1762, 1763)

Eddy, Rev. W. K., Sidon, Syria. Collection of ancient Phœnician glass and objects from Phœnician and Græco-Roman tombs near Sidon, Syria. Oct. 30, 1901... .. ..(1880)

Gerrard, Edward, & Sons, London, England. White rhinoceros, mounted, also skull of same; rhinoceros hornbill... .. ..(1879, 1891)

Hartman, Dr. W. D., Estate, West Chester, Pa. The Hartman collection of shells—also letters, photographs, etc., relating thereto. Jan. 28, 1902... .. ..(1947)

Hartley, Frank, Cumberland, Md. *Camocrinus* four specimens; *Sphaerocystites multifasciatus*, four specimens. Dec. 3, 1901.. .. .. ..(1912)

Hatcher, Head of *Cariacus chilensis* Gay, from the Andes of southern Patagonia. Sept. 30, 1901... .. ..(1851)

Hirase, Y., Kyoto, Japan. Japanese land shells. Sept. 30, 1901.....(1845)

James, George W., Phœnix, Arizona. Chemehuevi Indian baskets, forty specimens, and wooden block on which baskets are made, from Grand Cañon, Colorado. March 14, 1902... .. ..(1970)
Indian pottery from Arizona and New Mexico. Jan. 28, 1902. .. ..(1946)

Jones, M. T., Quillayute, Wash. Puma skin, mounted. July 22, 1901. .. ..(1809)

Link, G. A., Pittsburgh. Rough-legged Hawk. Feb. 13, 1902... ..(1951)

Love, John H., Woodbridge, N. J. A general Report of the Guard at Fort Pitt, May 2, 1778. Signed by John Mahan, Officer of the Guard. (Manuscript.) Nov. 8, 1901... .. ..(1889)

Morrill, Hon. Chas. H., Lincoln, Neb. Sand crystals and miscellaneous minerals. (34 specimens.) Aug. 5, 1901... .. ..(1830)

Prisoner A. 2619, Western Penitentiary, Riverside, Pa. Model, house made from paper. Oct. 10, 1902... .. ..(1866)

Reich, Wm., West Bridgewater, Pa. Loon, male, from Beaver, Pa. May 7, 1902... .. .. ..

British silver coins (two) from Jamaica: 1 crown (George III.), 1816; 1 shiling (Victoria), 1901, said to be rare, but common in Jamaica. March 31, 1902... .. ..(1996)
Three species seeds and pods from Jamaica. March 31, 1902. .. ..(1997)
Shell marl, from Bowden, Jamaica. March 31, 1902... .. .. ..(1998)

Cockerell, T. D. A., East Las Vegas, New Mexico. Collection of Coccidæ—cotypes. June 24, 1901... .. ..(1787)

Darlow, A., Omaha, Nebraska. Photographs, thirteen—views of geological formations along the Union Pacific R. R. Sept. 30, 1901. .. ..(1844)

Davis, Charles, Allegheny City. Carex, from Franklin Township, Allegheny Co., Pa. Nov. 16, 1901... .. ..(1897)

Davis, Jos. M., Pittsburgh. Large specimen of manganese ore, Crimora Mine, Crimora, Virginia. Nov. 23, 1901... .. ..(1906)

Davis, Dr. T. D., Pittsburgh. Small collection of plants from Yellowstone Park (collected June 10-20, 1901, by the donor). March 6, 1902... .. ..(1965)

Diehl, Hon. Wm. J., Pittsburgh. Original letter from William Pitt, at Whitehall, to the Commandant of Fort Pitt, Aug. 23, 1760; received Oct. 15, 1760. June 4, 1901... .. ..(1777)

Du Puy, Herbert, Allegheny City. Mummies of hawk (two), and mummy of cat, found in vicinity of Luxor, Egypt; ancient Egyptian papyrus (cursive Coptic), ancient Egyptian papyrus (cursive Greek), found at Medinet-Habou, Upper Nile, 1901, dating from the sixth century, relating to a conveyance of land by title. May 15, 1901. .. ..(1764)

Ebright, Fred, Altoona, Pa. Short-eared owl, Altoona, Pa., (about) Oct. 1, 1901. Oct. 19, 1901... .. ..(1877)

Edrington, Miss E. H., Vaughan, Washington. Piece of enameled brick from "Barn Elms," Plankatank River, Middlesex Co., Virginia: an old manor house built about 1700, once the homestead of the Berkeleys. Nov. 5, 1901... .. ..(1886)

Egypt Exploration Fund, Pittsburgh Branch, see pp. 41 *et seq.*

Eifrick, Rev. G. A., Cumberland, Md. Plants from Maryland, and Somerset Co., Pa., collected in 1901. Nov. 13, 1901... .. ..(1895)

Falconer, Wm., Schenley Park, Pittsburgh. Fruits and seeds of several species of plants. Dec. 28, 1901... .. ..(1928)

Fitzgerald, T. M., Buffalo, N. Y. Pistillate flowers of *Cycas revolute* and *Cycas circinalus*. Sept. 30, 1901... .. ..(1856)

Fleming, Dvaid L., Captain and Chaplain 1st Colorado Infantry U. S. V. Malay creese, with scabbard. Island of Mindanao, P. I. April 6, 1901... .. .. ..

Hebert, Victor, Pittsburgh. Two bones from the hind-fins of "Moon-fishes." Aug. 5, 1901. .. .. (1832)

Holbrook, Prof. R. Heber, Pittsburgh. Fossil—*Agelacrinus holbrooki.* .. .. (1846)

Holland, W. J., Pittsburgh. Nodule resembling a tomahawk, found near Braddock, Pa. July 24, 1901... .. .. (1814)

Holmes, Miss Catherine R., Allegheny, Pa. Westmoreland County plants, nine herbarium specimens. Dec. 2, 1901... .. .. (1910)

Hovey, George U. S., White Church, Kansas. Photograph of carved stone (head). April 11, 1901... .. .. (1748)

Hume, A. W., Octave, Arizona. Live specimen of Gila Monster from Arizona. Aug. 30, 1901... .. .. (1839)

Humphreys, Stewart & Co., Pittsburgh. Group of galena crystals from Joplin, Mo. Nov. 12, 1901... .. .. (1892)

Joy, Mrs. Jennie H., Philadelphia, Pa. Cane made from wood of the Confederate ram "Merrimac," "presented by Col. Bayne of Norfolk to Gen. Neilson of Baltimore, Md., who presented it to John H. Joy of Philadelphia, March, 1885." June 26, 1901... .. (1791)

Keenan, Miss Sophie G., Pittsburgh. Collection of Cuban fire-flies from Isle of Pines. July 25, 1901... .. .. (1816)

Kellerman, Prof. W. A., Columbus, Ohio. Collection of fungi, mostly parasitic. July 25, 1901... .. .. (1817)
Ohio Fungi Exsiccati, Fas. 1 and 2, Nos. 1-42... .. .. (1930, 1963)

Kerns, Mrs. Carrie M., West Freedom, Pa. Garter-snake, caught Jan. 22, 1902. Jan. 25, 1902... .. .. (1943)

King, Hon. Wilson, Birmingham, England. Mexican, Peruvian and Central American antiquities. May 22, 1901... .. .. (1768)

Kirk, Arthur, Sharpsburg, Pa. American Bittern, Sharpsburg, Pa. Dec. 7... .. .. (1918)

Koch, August, Williamsport, Pa. Red-throated loon, Williamsport, Pa. Exchange. April 1, 1901... .. .. (1744)
Rough-legged hawk. Exchange. April 8, 1901... .. .. .. (1747)

Koenig, Dr. Adolph, Pittsburgh. Irish peat—two specimens. May 4, 1901. .. .. (1753)

Kountz, Mrs. A., Pittsburgh. Phial containing nine fleas. July 25, 1901. .. .. (1815)

Kneeland. Harry, Allegheny. Hawk-moth (*Philampelus pandorus*). July 22, 1901... .. .. (1803)

Knipe, Rev. S. W., Oceanic, N. J. Plants from Pennsylvania, New Jersey, and North Carolina, collected by Rev. S. W. Knipe, his son Leighton, and daughter Bertha. Dec. 4, 1901... .. ..(1913)

Leppert, C. E., Carnegie, Pa. Snake in bottle, found in the Ohio River, at foot of Page St., during the Johnstown Flood. June 26, 1901. .. ..(1789)

Lichtenthaler, Miss Emma, Pittsburgh. Children's dishes fused into a mass by the Chicago fire of 1871. Feb. 25, 1902... .. ..(1954)

Link, Gustav A., Pittsburgh. Female water-snake, caught on Saw Mill Run; exposing thirteen young when dissected. Aug. 19, 1901. .. ..(1835)
Prunus padus L., flowering specimens. March 25, 1902.....(1976)

Lockhart, Chas., Esq., Pittsburgh. Mounted birds from Scotland (eighteen specimens). Jan. 2, 1902.. .. ..(1932)

Lorraine, F. W., Toledo, Ohio. About twenty fragments of spinel and chondrodite from quarry near Toledo, Ohio. Nov. 23, 1901..(1907)

Lynch, Faulkner G., Erie, Pa. Herring gull, Erie, Pa. Jan. 2, 1902. .. ..(1933)

Mann, Henry F., Pittsburgh. Photograph of large fungus, Somerset Co., Pa., near Harnedsville. Jan. 20, 1902... .. ..(1939)

Mathison & Co., New York, N. Y. Collection of ores and finished products of antimony, nine specimens. March 14, 1902... .. ..(1969)

McElroy, Samuel M. and E. N. Ohl, Pittsburgh. Diamond drill core of 408 feet, from Strabane Twp., Washington Co., Pa. Jan. 28, 1902. .. ..(1945)

McLure, Mrs. C. R., Pittsburgh. One old punch-bowl (base, bowl and lid), which once belonged to Major Beckham, Warden of the Western Penitentiary. It was used about 1820 on a river steamer plying from Pittsburgh to lower ports on the Ohio. July 22, 1901...(1799)

Medsger, O. P., Jacobs Creek, Pa. Plants from Western Pennsylvania. March 18, 1902... .. ..(1974)

Mellon, James R., Pittsburgh. Bonds of Confederate States of America, viz.: $100, Aug. 19, 1861; $500, Feb. 20, 1863; $1,000, May 1, 1861. Dec. 27, 1901... .. ..(1924)

Miller, W. N., Pittsburgh. Slag, coke, and iron specimens (fourteen), from old Westmoreland County furnaces. Dec. 28, 1901...(1926)
Herbarium specimens of plants collected in Western Pennsylvania, season of 1901. March 18, 1902... .. ..(1973)

Milligan, John M., Swissvile, Pa. Specimens of Cassia and Convolvulus (five herbarium specimens) from Allegheny County, Pa. Nov. 18, 1901... .. ..(1899)

Mills, Theo. A., Carnegie Museum. Cast taken from life-mask of President Abraham Lincoln made by Clark Mills and Theo. A. Mills, his son, at Washington, D. C., sixty days before the assassination of President Lincoln. Nov. 5, 1901.....(1884)

Morrow, Eustace S., Pittsburgh. Canceled notes of the City of Pittsburgh: $1, 1846; $2, 1846; $3, 1837. Nov. 5, 1901.....(1881)

Morse, E. K., Pittsburgh. Ruffed Grouse, Cherry Tree, Indiana Co., Pa. Dec. 28, 1901.....(1925)

Negley, H. H., Pittsburgh. Plants collected near State College, Center Co., Pa., about 1861. Nov. 18, 1901.....(1900)
Seeds and fruits from California and Florida. Dec. 28, 1901. (1927)

New York Zoological Gardens, Bronx Park, New York City. Cow moose. July 22, 1901.....(1807)
Young moose. Aug. 30, 1901.....(1837)

Ohl, Erwin N., and McElroy, Samuel M., Pittsburgh, Pa. Diamond drill core of 408 feet, from Strabane Twp., Washington County, Pa. Jan. 28, 1902.....(1945)

Ortman, Dr. A. E., Princeton, N. J. Collection of invertebrate and vertebrate fossils, consisting of 34 species and 107 specimens. Exchange. Dec. 4, 1901.....(1914)

Penfield, Prof. S. L., New Haven, Conn. Lithiophilite, Branchville, Conn. (type); thaumasite, West Paterson, N. J. (type); prehnite, Harzburg, Germany; albite-oliclase, St. Lawrence Co., New York. Exchange. Jan. 20, 1902.....(1938)

Peterson, I., Harrison, Nebraska. Plants from Sioux Co., Nebraska. Dec. 28, 1901.....(1929)

Peterson, O. A., Harrison, Nebraska. Collection of lepidoptera, etc., from Sioux Co., Neb.....(1788, 1802)

Phillips, John, Pittsburgh. Wolverine, skin and skull, British Columbia. March 1, 1901.....(1957)

Pierce, A. K., Renovo, Pa. Long-tailed Duck and Bonaparte's Gull. April 23, 1901.....(1752)

Pierce, P. E., U. S. A., Pittsburgh. Skull of native Filipino Igorrote, killed by a bolo and buried near Pozzombio in Province Pangasinan. The hole in frontal bone was from wound inflicted by bolo. July 24, 1901.....(1813)

Pim, W. Paul, Leasuresville, Pa. Flying squirrel. March 3, 1902...(1959)

Pitcairn, Mrs. Robert, Pittsburgh. Trap-door spider, vicinity of Los Angeles, southern California. May 23, 1901.....(1771)
Concretion made up of fossil shells, southern California. May 23, 1901.....(1772)

Pittsburgh Branch Egypt Exploration Fund. Egyptian antiquities, nine cases, as per list.. .. ..(1917, 1948)

Pittsburgh, the City of, Pa. (through Hon. A. M. Brown, Recorder). The old seal of the City of Pittsburgh, used prior to the adoption of the charter of 1901; also the press with which it was used. Sept. 30, 1901.. .. ..(1843)
(Through Finance Committee.) Canceled bonds of the City of Pittsburgh. Nov. 6, 1901.. .. ..(1887)

Pittsburgh Testing Laboratory, Pittsburgh. Minerals—fifty-eight lots. Nov. 23, 1901.. .. ..(1905)

Porter, H. K., Pittsburgh. Specimen of native copper encased in calcite crystals, from Anaconda Mine, Montana. Jan. 25, 1902. (1944)

Rankin, Thomas, Pittsburgh. Trunk of hickory with ingrown branch. July 30, 1901.. .. ..(1823)

Rappleyea, Pittsburgh. Old lantern, said to be the very first lantern used on the first canal-boat employed on the Penna. Canal and Portage Road. Dec. 14, 1901.. .. ..(1921)

Rea, James C., Pittsburgh. Great Blue Herron, juv., Killbrennan Sound, Scotland; English Woodcock, Crosaig Lodge, Kintyre, Argyllshire, Scotland. March 28, 1902.. .. ..(1902)

Redman, C., Beaver, Pa. Pied-billed grebe, West Bridgewater, Pa. April 20, 1901.. .. ..(1751)

Reed, J. R., Pittsburgh. Miscellaneous collection, ethnological and archæological specimens. Oct. 10, 1901.. .. ..(1867)

Rice, Charles F., Worcester, Mass. Minerals from Newfound Mica Mine, viz.: mica, garnet, beryl, tourmaline, quartz, orthoclase, and pyrite from Bristol, N. H. March 11, 1902.. .. ..(1966)

Rinehart, J. M., Pittsburgh. "Hindoo Book" on vegetable fibre—nine sheets. April 6, 1901.. .. ..(1745)

Roberts, Col. T. P., Pittsburgh. Herbarium specimens, *Plantago* and *Vitis*, from Lock No. 1, Monongahela River, July 31, 1901. Nov. 16, 1901.. .. ..(1898)

Rodgers, T. L., Pittsburgh. Picture of Pittsburgh grain elevator, built 1865, destroyed by fire July, 1877, during the P. R. R. riots. June 26, 1901.. .. ..(1790)

Scully, H. R., Pittsburgh. Autograph letter of Wm. Seward, dated Feb. 23, 1854, addressed to Chas. B. Scully, Pittsburgh. Nov. 8, 1901.
.. ..(1888)

Shafer, J. A., Pittsburgh. Plants collected near Niagara Falls, Sept. 14-16, 1901, also a few from Cleveland and Buffalo. Sept. 30, 1901. .. .. .

Van Kirk, A. W., Pittsburgh. Plants collected at Georgian Bay, Ontario, Canada. Aug. 19, 1901... .. ..(1834)

Walker, Dr. R. L., Carnegie, Pa. Loon, Carnegie, Pa. May 7, 1901. .. ..(1758)
Large specimens of quartz and smoky quartz, from Alexandria County, Virginia. Oct. 12, 1901... .. ..(1871)
Limonite concretion from hill near Carnegie, Pa. (Cut of new Wabash R'y.) Nov. 12, 1901... .. ..(1893)
Quartz crystal from Alexandria County, Virginia. Nov. 23, 1901. .. ..(1903)
American rough-legged hawk, Bridgeville, Pa. Dec. 11, 1901. .. ..(1920)
Red-tailed hawk. March 27, 1902... .. ..(1990)

Ward, Jesse S., Pittsburgh. *Limax maximus* found in 37th Ward, Pittsburgh. Nov. 13, 1901... .. ..(1894)

Watson, Wm., Sarversville, Pa. Salamanders (two specimens), Butler Co., Pa. Aug. 30, 1901... .. ..(1838)

Webster, Frederic S., Pittsburgh. Plants collected in August, 1901, at Crosaig Lodge, Kintyre, Argyllshire, Scotland. Nov. 8, 1901. .. ..(1890)
European vipers (two specimens), Kintyre, Argyllshire, Scotland. (Alcoholic specimens.) March 27, 1902... .. ..(1987)
Hedgehog, Crosaig Lodge, Kintyre, Argyllshire, Scotland. March 27, 1902... .. ..(1989)
Blue hare, brown hare, grey rabbit: from Kintyre, Argyllshire, Scotland. March 28, 1902... .. ..(1994)

West, Samuel, Pittsburgh. Water-bug (*Benacus griseus*). June 24. 1901... .. ..(1786)

White, C. A., Salineville, Ohio. Moth (*Eacles imperialis*). July 22, 1901... .. ..(1811)

Wiley, C. S., Pittsburgh. Belgian hares (two specimens) in the flesh. July 22, 1901... .. ..(1804)

Williams, Dr. Roger, Pittsburgh. Mounted head of Indian black buck, shot in foot-hills of Himalayas, near Hurda, by a native; and pelt of same. Oct. 10, 1901... .. ..(1868)

Williamson, E. B., Bluffton, Ind. Reptilia from Tennessee, five species represented by eleven specimens. May 9, 1901... .. .. (1760)
Aquatic plants from Indiana, herbarium specimens. Sept. 5, 1901. .. ..(1841)
Small collection of Unios from Indiana. March 6, 1902... ..(1964)

Wilson, W. J., Seattle, Washington. Sea-weed growing on stone. Jan. 20, 1902... .. ..(1941)

Wood, Prof. C. B., Pittsburgh. Sioux Indian headdress, given Mr. Wood by a native—"Mr. Marshall, now teaching in Indian Territory." Sept. 2, 1901.....(1840)

Woods, E. A., Pittsburgh. Scale insect found on poplar tree. Aug. 5, 1901.....(1831)
Continental money, five pieces. March 17, 1902.....(1972)

Yohe, Isaac, Jr., Monongahela City, Pa. Fac-simile of the Declaration of Independence, engraved in 1829; only two hundred copies printed. March 17, 1902.....(1971)

Zoological Gardens, Pittsburgh. Emu, in flesh. Aug. 30, 1901..(1836)
Mandarin Duck (*Aix galericulata*), Jan., 1902. Feb. 13, 1902. .....(1952)
Baboon, in the flesh. Skin saved for mounting. March 1, 1902. .....(1955)
Helodema horridum, in the flesh Skin saved. March 1, 1902. .....(1956)
Asiatic elephant, in the flesh. Skin and skeleton saved. March 26, 1902.....(1985)
Hippopotamus, in the flesh. Skin and skeleton saved. March 26, 1902.....(1986)

ACCESSIONS TO THE LIBRARY OF THE CARNEGIE MUSEUM.

From April 1, 1901, to April 1, 1902.

Accession is by exchange unless otherwise designated.

Academy of Natural Sciences of Philadelphia, Philadelphia, Pa. Report of Treasurer, 1900; Proceedings, 1900, Pts. 2 and 3, 1901, Pts. 1 and 2; Entomological Student, Vol. I., No. I., 1900.....(478, 482, 484, 531, 588)

Adelaide. The Public Library, Museum, and Art Gallery, Adelaide, South Australia. Report for 1899-1900. May 4, 1901.....(506)

Aldrich, Hon. T. H., Birmingham, Ala. Fauna of Alabama: Fresh water and land shells. By James Lewis, M.D. (Pamphlet, Geol. Surv. of Alabama.) Gift. February 12, 1902.....(631)

Allegheny Observatory, Allegheny, Pa. Three pamphlets. September 30, 1901.....(567)

American Museum of Natural History, New York City. Report, 1900; Memoirs, Vol. I., Pts. 6 and 7; Vol. II., Pt. 3; Bulletins, Vol. XI., Pt. 4; Vol. XIV., Pt. 1; Vol. XV., Pt. 1; Vol. XVII., Pt. 1.....(526, 626, 611, 639)

American Philosophical Society, Philadelphia, Pa. Proceedings, Vol. XL., Parts 165, 166, 167.....(539, 642, 554)

Anthropological Institute of Great Britain and Ireland, London, England. Journal, Vol. XXVI., No. 1. June 1, 1901.. .. ..(525)

Australian Museum, Sydney, N. S. Wales, Australia. Report, 1900; Records, Vol. IV., Nos. 1-5. .. ..(518, 563, 606, 638)

Bausch & Lomb Optical Company, Rochester, N. Y. Journal of Applied Microscopy, Vol. II., No. 12. Gift. May 13, 1901.....(514)

Prof. C. E. Beecher, New Haven, Conn. Four pamphlets on paleontology. March 12, 1902... .. ..(650)

Belgique. Musée Royal d'Histoire Naturelle de Belgique, Bruxelles. Mémoires, Tome I; three parts. Jan. 13, 1902.. .. ..(609)

Bernice Pauahi Bishop Museum, Honolulu, H. I., U. S. A. *Occasional Papers,* Vol. I., Nos. 3 and 4; *Fauna Hawaiiensis,* Vol. I., Pt. 3; Vol. II., Pt. 5; Key to the Birds of the Hawaiian Group..... .. ..(569, 615, 629)

The Biological Club of the Ohio State University, Columbus, Ohio. The O. S. U. Naturalist, Vol. I., Pts. 1-8 inclusive. July 22, 1901..(541)

Botanic Garden, Washington, D. C. Two pamphlets; by W. R. Smith. Jan. 31, 1902... .. ..(623)

Bristol Museum, Bristol, England. *Reports,* for 1899 and 1901; *General Guide.* Ninth edition.. .. ..(492, 635)

British Museum, London, England. Catalogues, five volumes...(498, 653)

Prof. S. B. Brown, Morgantown, W. Va. Bulletin No. 1, West Virginia Geological Survey. Dec. 13, 1902.. .. ..(598)

Brooklyn Institute of Arts and Sciences, Brooklyn, N. Y. *Prospectus,* 1901-1902; *Science Bulletin,* Vol. I., No. 1, and one pamphlet. .. ..(549, 559)

Burns, Frank L., Berwyn, Pa. Two pamphlets. Gift. Feb., 1902...(634)

Buenos Aires, Museo Nacional de, Buenos Aires, Argentine Republic. Comunicaciones, Tomo I., Nos. 8 and 9... .. ..(540, 601)

Cambridge University, Museum of Zoology, Cambridge, England. Thirty-fifth Annual Report of the Museums and Lecture Rooms Syndicate (for 1900). June 28, 1901... .. ..(532)

Canada, Department of Agriculture, Ottawa, Canada. Appendix to the Report of the Minister of Agriculture: Experimental Farms—Reports for 1900. May 21, 1901... .. ..(516)

Canadian Entomologist, London, Ontario, Canada. Current numbers. .. ..(416)

Canterbury Museum, Christchurch, New Zealand. Guide to the Collections in the Canterbury Museum. Sept. 5, 1901. . . . . (557)

Carnegie Library of Pittsburgh. Publications of the Carnegie Library, current numbers; Publications Nos. 45, 53, and 54 of the Field Columbian Museum; Anales del Museo Nacional de Montevideo, Tomo II., Fasc. XVI., pp. 369-448. June 28, 1901. . . . . (384, 533)

Carnegie Museum. Purchases.

New England Zoological Club, current numbers. . . . . (268)
Biologia Centrali-Americana, current numbers. . . . . (350)
Museums Journal, Vol. I., Nos. 1-8. . . . . (550, 640)
Catalogue of North American Plants (Heller). . . . . (477)
Anglo-American Pottery. . . . . (614)
British Museum Catalogue of Birds, 27 Vols. . . . . (507)
Manual of Conchology, current parts. . . . . (319)
Conchological works received with the Hartman collection of shells. . . . . (658)
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REPORT OF THE PRESIDENT OF THE ANDREW CARNEGIE NATURALISTS' CLUB.

PITTSBURGH, PA., April 1, 1902.

DR. W. J. HOLLAND,
Director of the Carnegie Museum,
Pittsburgh, Penna.

DEAR SIR:

As President of the Andrew Carnegie Naturalists' Club, I have the honor to submit the following report of the work done in that society during the past year.

Meetings have as a rule been held regularly throughout the past year, excepting, of course, during the summer season, May 25 to October 12. During that period, individual members built up their collections; and the club now counts among its members from four or five really good collections of insects, chiefly Coleoptera.

The first meeting of the Club year was held October 12. Shortly after the annual circular of invitation was distributed among the schools with the usual result of increased attendance.

The semi-monthly lecture has continued to be a very attractive feature. The range of subjects covered is as broad as can be imagined. Since the report of last year, about twenty speakers have appeared before the Club, and the list contains many of note and eminence. Like their elders, the boys are best satisfied when the speaker provides himself with illustrative material of some sort or other. And so at every meeting may be seen blackboard drawings, natural material, Museum models and specimens, or the stereopticon.

It was deemed practicable and profitable to have lectures on the subjects of the Carnegie Museum Essay Contest. The size of the resultant audiences might warrant the assertion that more than one of the prize-winners heard the Club lectures on "The Animal Life of the Past" and "The Aboriginal Inhabitants of America."

It should perhaps be stated that all Club lectures have been and are open to the general public.

Last year the experiment was tried of having a "Question Box" and certainly it was a most encouraging experiment. We shall have more.

The excursion has always been one of the most profitable features of the Club. With the co-operation of the Director of the Museum, plans are now being completed for a more extended series of excursions than has yet been possible, the excursions to be in charge of members of the Museum staff.

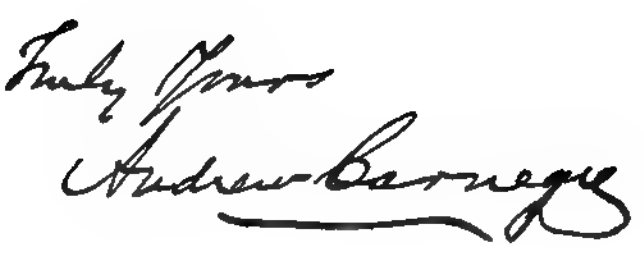
A word as to the classes. These have always been in charge of the more experienced members of the Club, but several of these have been compelled for various reasons to leave and it has been impossible to fill their places. One class alone, the insect class, is still working. The others may come into life under the touch of practical outdoor work.

In conclusion, I wish to acknowledge our indebtedness to the Museum for its frequent and generous aid during the past year.

Respectfully submitted,

ROBERT F. FOERSTER,

President.



Publications of the Carnegie Museum

THE CARNEGIE MUSEUM

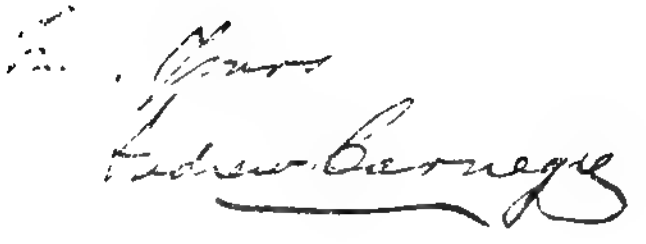
PITTSBURGH

ANNUAL REPORT OF THE DIRECTOR

FOR THE

YEAR ENDING MARCH 31

1903



Publications of the Carnegie Museum: Serial No. 22

THE CARNEGIE MUSEUM

PITTSBURGH

2.

ANNUAL REPORT OF THE DIRECTOR

FOR THE

YEAR ENDING MARCH 31, 1903

1903

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OF THE

CARNEGIE INSTITUTE

March 31st, 1903.

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MUSEUM COMMITTEE.

1902—1903.

C. C. MELLOR, *Chairman.*

Thomas Morrison Carnegie,
Samuel H. Church,
George H. Clapp,
William N. Frew,
Hon. John D. Shafer,
Hon. James H. Reed,
*Hon. J. O. Brown.

DIRECTOR.

W. J. Holland, Ph.D., LL.D., etc.

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*Deceased.

LETTER OF TRANSMITTAL.

MR. C. C. MELLOR,

Chairman of the Committee on the Museum of the Board of Trustees of the Carnegie Institute.

DEAR SIR:—I have the honor herewith to submit to you my sixth annual report as Director of the Carnegie Museum.

Reviewing the activities of the year as a whole, we have great occasion to congratulate ourselves upon the success, which has attended our efforts. While in some departments of our activity comparatively little has been done, in other fields of work our success has been almost phenomenal, and in consequence I feel great pleasure in submitting to you the accompanying report.

Permit me on behalf of myself and my associates on the staff of the Museum to renew to you and to your colleagues of the Board of Trustees our most hearty thanks for the wise and intelligent coöperation which you have accorded to us in this, as in all former years, and to express to you our gratitude for the never failing courtesy displayed in the relations which we have mutually sustained to each other.

I am,

Very sincerely,

W. J. HOLLAND, *Director.*

ANNUAL REPORT UPON THE CONDITION AND PROGRESS OF THE CARNEGIE MUSEUM IN PITTSBURGH.

Submitted March 31st, 1903.

By W. J. HOLLAND, *Director.*

A review of the year which has come to its close reveals the fact that in many respects it has been the most successful, so far as results are concerned, of any of those which have been numbered in the life of the institution. The increased revenue, for which we are indebted to the splendid generosity of the founder, has enabled us to do many things, which it is the function of such an institution to undertake, but from which we had been hitherto deterred by the lack of financial resources. Although the sum at our disposal has been very modest, when compared with the funds at the disposal of some sister institutions, it has proved sufficient to enable us to make a large advance in the line of our activities, and by careful and thoughtful expenditure we have, as we believe, achieved results the importance of which will be more and more revealed in time to come.

One of the best evidences that such an institution is doing the work for which it is designed is found in the fact of its recognition by the world of scientific men. A few years ago the name of the Carnegie Museum was unknown; to-day allusions to its work are found everywhere. Not alone in the ephemeral literature of the daily press, but in standard works of reference recognition is given to the value and importance of the collections which have already been amassed, and of the researches which are being constantly carried on. If it be true that "a good name is better than great riches," the Museum may well be congratulated upon the results which have been achieved.

During the past year we have been necessarily much distressed at times on account of the wholly inadequate accommodation at our disposal. Both the room available for exhibition purposes and for laboratory work is wholly insufficient. Two propositions have been considered in this connection. One was to secure by lease, until the addition to the building now contemplated is completed, a house with enough ground adjacent thereto to enable us to install in it some portion of our force and to erect upon the lot a laboratory, in which certain portions of our work might be carried on. The other proposition was to secure from the authorities of the city permission to erect somewhere in contiguity to the Museum a structure creditable in its external appearance, which might be temporarily used for laboratory purposes, and then turned over to the city of Pittsburgh for a shelter and rest-house in the park. The latter proposition was viewed with favor by the Director of the Department of Public Works, but the Superintendent of Parks pointed out to us the fact that the location, which we suggested, at the right side of the bridge leading into the Park, in the neighborhood of the spot where the great cannon are placed, is shortly to be graded off, and he suggested to us the propriety of deferring any action of this sort until a later date. The ground immediately to the south of the present structure, which might also have served our purpose, will certainly be needed, when it comes to erecting the new building, as a place upon which to put materials to be used in the process of construction, and the architect very emphatically protested against our occupation of the ground in the way we outlined, owing to this necessity. Matters stand in this regard practically as they stood a year ago, merely with this difference, that we are now positively confronted with the necessity of either renting or building, unless the third alternative suggested by Mr. Alden should become a possibility. Mr. Alden has pointed out, that, if the work of building the addition to the Museum is commenced this spring, it is barely possible that some portions of the structure might be so rapidly advanced as to put under cover a few apartments, the use of which might be given to the Museum for laboratory purposes until the whole work is completed. Such a solution of the difficulty might perhaps be the best of all. We shall endeavor to get along as well as we can for some months longer, but, unless relief is afforded by that time, we shall certainly have to either build a

temporary structure in which to work, or rent a house. It is no exaggeration to say that at present we are crawling over each other's backs in the effort to do our work and do it well, and every available nook and cranny in the present building has been utilized for the purpose of storing away material which should not be in storage, but which should be in the hands of our staff receiving their study and attention.

The property represented by the collections belonging to the Museum has grown greatly in value during the past year through gift, purchase, and collections made by the members of the staff. As in previous reports, I herewith submit a tabular statement based upon the books of the institution, showing the value of the contents of the Museum. As I have pointed out in previous reports, so I again call attention to the fact that this estimate is under rather than over the actual value, because in a multitude of cases we have no means of estimating the value of gifts.

STATEMENT OF THE PERSONAL PROPERTY, OR ASSETS, OF THE CARNEGIE MUSEUM, APRIL 1st, 1903.

Collections purchased and made by the Museum, cost		$ 99,261.50
Collections donated, of which the cost to the donors is known		68,321.44
Exhibition Cases, cost		28,015.39
Furniture, cost		714.70
Boxes, Trays, Storage Cases, &c., cost		1,624.61
Library:		
Books donated, estimated value	$1,825.00	
Books purchased, cost	3,663.42	
		5,488.42
Photographs, Paintings, and Frames		451.96
Photographic Apparatus		380.80
Herbarium Boxes, cost		619.85
Laboratory fixtures, less ten per cent. for annual depreciation		942.76
Tools, less ten per cent. for annual depreciation		506.50
Publications on hand for sale and exchange		2,600.00
Total		$208,927.93

Collections deposited with the Museums as Loans, valued at*	40,000.00
Total	$248,927.93
Total value of Collections given in Report, April 1st, 1902	208,530.19
Increase in value during the year ending April 1st, 1903	$40,497.84

VISITORS.

The number of visitors to the Museum is undoubtedly constantly on the increase. The halls are at times crowded to an uncomfortable extent. This is especially true on Sundays, when the Museum is much resorted to both by young and old. During the past year we have been honored by the presence of many eminent scientific men, some of whom have come to Pittsburgh for the special purpose of studying the collections of the Museum. Not a few of these visitors have been from foreign countries. The Fifty-first Annual Meeting of the American Association for the Advancement of Science and Affiliated Societies, was held in Pittsburgh from June the 28th to July the 3d, 1902, at the invitation of the Trustees of the Carnegie Institute and of the various educational and civic organizations of the two cities. The meeting, which was pronounced by the daily press to have been one of the largest and most successful meetings of the Association which has ever been held, brought to the city a large body of the most eminent scientific men of the country, who, without exception, indicated in the most gratifying terms their approval of the work which is being carried on by the Museum. In the fall of the year the foreign delegates to the Thirteenth International Congress of Americanists were welcomed in Pittsburg as the guests of the Museum. They spent a day with us, the forenoon of which was devoted to visiting the Museum and the conservatories. The afternoon was given up to a visit to the steel works at Homestead. Official representatives of most of the European governments and of almost all of the states of Central and South

*Reduced from the figure given in last Report by the withdrawal and purchase of certain collections.

America were present, among them a number of men who have achieved world-wide reputations because of their researches in the domains of ethnology and archaeology. Our visitors on this occasion gave unqualified testimony to their approbation of the work being done in this youngest of the great museums of America. While it is indeed gratifying to know that the institution is meeting a great popular want, it is also gratifying to know that by the rank and file of scientific men its work is sincerely appreciated.

THE STAFF.

The necessity for increasing the working force of the Museum, to which I called attention in my last Annual Report, has been in part met by the appointment of Mr. C. V. Hartman, as Curator of Ethnology and Archæology and by the appointment of Professor A. E. Ortmann, as Curator of Invertebrate Zoology. We should have a Curator in the section of Recent Vertebrates. Inquiries have been for some time carried on for the purpose of finding a competent person to take charge of this section. Arrangements have been made to secure the services of a taxidermist of ability to give assistance in the Taxidermic Laboratory, where an increase of the force is imperatively required. This assistant, however, cannot begin the discharge of his duties until about the 1st of September, owing to contract obligations which prevent his coming to us before that time.

Mr. and Mrs. Herbert H. Smith, after remaining with us a few months, tendered their resignations that Mr. Smith might devote himself to literature. Mr. Hugo Kahl, formerly of the University of Kansas and later with the University of Illinois, was appointed to discharge, at least in part, the duties in connection with the Section of Entomology, which had been entrusted to Mr. and Mrs. Smith.

Mr. W. W. Worthington has been temporarily engaged, during the winter months, to collect birds for us in Florida. The names of those who during the past year have been for the whole, or a portion of the time, connected with the Staff of the Museum, or are under appointment to render services within the coming year, are the following:

W. J. Holland, Director, and Curator of Entomology.

Rev. A. A. Lambing, D.D., Honorary Curator of Historical Collections.
Mr. George H. Clapp, Honorary Curator of Conchology.
Mr. Magnus Pflaum, Honorary Curator of Numismatics.
Mr. J. B. Hatcher, Curator of Paleontology and Osteology.
Mr. C. V. Hartman, Curator of Archæology and Ethnology.
Mr. A. E. Ortmann, Curator of Invertebrate Zoölogy.
Mr. Douglas Stewart, Assistant in the Office of the Director, and Custodian of the Mineralogical Collections.
Mr. J. A. Shafer, Custodian in Charge of the Botanical Collections, and Accession Officer.
Mr. W. E. C. Todd, Custodian in Charge of the Collections of Recent Vertebrates.
Mr. Hugo Kahl, Assistant in the Section of Entomology.
Mr. Herbert H. Smith, Assistant in the Section of Zoölogy.
Mrs. Herbert H. Smith, Assistant in the Section of Zoölogy.
Mr. F. S. Webster, Chief Preparator in the Section of Zoölogy.
Mr. Arthur S. Coggeshall, Chief Preparator in the Section of Paleontology.
Mr. Earl Douglass, Assistant in Research, Field, and Laboratory, in the Section of Paleontology.
Mr. O. A. Peterson, Field Collector and Assistant in the Laboratory in the Section of Paleontology.
Mr. Theodore A. Mills, Modeler and Sculptor in the Section of Ethnology.
Mr. Wilson Banks, Modeler.
Mr. Louis S. Coggeshall, Assistant Preparator in the Section of Paleontology.
Mr. Sidney Prentice, Draughtsman in the Section of Paleontology.
Mr. C. W. Gilmore, Field Collector and Assistant in the Laboratory in the Section of Paleontology.
Mr. W. H. Utterback, Field Collector and Assistant Preparator in the Section of Paleontology.
Mr. A. W. Vankirk, Assistant Preparator in the Section of Paleontology.
Mr. Gustav A. Link, Assistant Preparator in the Section of Zoölogy.
Mr. Louis H. Townsend, Volunteer Assistant in the Taxidermic Laboratory, Section of Zoölogy.
Miss Grace Kinzer, Assistant in the Section of Botany.

Miss M. J. Stribling, Stenographer.
Mrs. Elizabeth Courtney, Stenographer.
Miss Clara Hillman, Assistant in the Office.
Norman Boss, Assistant in the Section of Paleontology.

As in previous years, Mr. Carnegie has generously made provision for the payment of the salaries of those members of the staff who have been engaged in the work of the Section of Paleontology, with the exception of the salary of the Curator, which is paid from the general fund.

The Director takes this occasion to commend in high terms the industry and fidelity to duty of the members of the Staff, and their never failing good nature, in spite of the great difficulties with which we have been compelled to contend, owing to the lack of sufficient room in which to do our work to the best advantage.

MAMMALS.

The collection of mammals has not greatly increased during the year. A few specimens have been received from the Pittsburgh Zoological Garden, and from other local sources. Several species from Costa Rica were secured from Mr. M. A. Carriker, Jr.

Mr. F. S. Webster has constructed the manikin of a small hippopotamus which we received from the Zoological Garden last spring, and it is now ready for the skin when the latter shall have been somewhat thinned down by "beaming." Owing to the extreme thickness of the skin a great deal of labor has been necessarily expended upon it in order to enable the taxidermist to handle it successfully. The zebra colt received from the Zoological Garden, a large puma, several lynxes, and a number of small mammals to the number of forty-five, representing about thirty-one species belonging to the Pennsylvanian fauna, have been mounted and placed on exhibition. A number of exotic species belonging to the collection made by Mr. H. H. Smith in the province of Santa Marta, Colombia have also been mounted. A large tank has been secured in which the skins of our elephants are being preserved in solution. The skeletons of a number of large mammals have been cleaned and partially prepared for mounting.

The available space for the exhibition of mounted mammals is, however, so limited, that it will be practically out of the question to satisfactorily display any large number of these, until the completion of the building.

BIRDS.

The room devoted to the ornithological collection has been renovated, and a sufficient number of moth-proof storage cases of the latest pattern have been provided to hold the entire series of skins. Suitable book cases for the books of reference most needed in this section have been secured, and Mr. W. E. C. Todd, Custodian, has placed his personal library on deposit in the Museum. File-cases and other needful office facilities have been furnished, so that the way is now open for work along more strictly scientific lines. The entire collection of birds has been overhauled and is now being catalogued. This work has consumed much of the time of the Custodian. Its completion will permit the systematic arrangement of the collection, hereofore impossible. Considerable progress has also been made upon several scientific papers based upon the collections, and their publication during the coming year may be expected.

Although no special expeditions have been undertaken, the collection of birds has been increased during the past year by 2,934 specimens, and now comprises in the neighborhood of 12,000 examples, representing approximately 1,700 species. These additions came mainly from three sources, as follows: First, a collection of 840 mounted specimens, representing 209 species, all taken in Holland, and secured by purchase from Baron Snouckaert van Schauburg. A portion of this collection has been placed on exhibition, but the larger part remains in storage. This collection is a very valuable one, embracing as it does a representative series of many of the birds of western Europe. Second, we have secured by purchase from Mr. M. A. Carriker, Jr., a collection of 500 skins from Costa Rica, embracing some 200 species, most of which are among our desiderata. Thirdly, from Mr. W. W. Worthington we have received over 400 specimens from northern Florida, adding largely to our series of North American birds. Mr. Worthington is still at work in that section and his efforts will no doubt yield more desirable material later on. In

addition to these collections there have come to the Museum a considerable number of specimens of local interest, and recently a lot of one hundred birds from Arizona, which is a desirable acquisition.

Mr. G. A. Link, under the supervision of Mr. Webster, has mounted a large number of specimens many of which are intended to complete the exhibition series illustrating the avifauna of Pennsylvania. Mr. Link is at present engaged in mounting a series of the females of Pennsylvanian species which hitherto have been only represented in the exhibition cases by the male birds. The birds of Scotland presented by Mr. Lockhart have been remounted and placed on exhibition together with a number of Scotch birds presented by Messrs. Childs Frick, James Rea, and F. S. Webster. The group of flamingoes has been carefully renovated and steps have been taken to make the case containing it dust-proof. A number of the hawks of Colombia have been mounted and added to the series placed on exhibition last year.

REPTILES AND BATRACHIANS.

No large additions have been made to these collections during the past year. A number of specimens representing the local fauna have been added by gift or through collections made by members of the staff in the vicinity of Pittsburgh. A very considerable quantity of unclassified material representing these orders is in our possession, but until the services of a competent herpetologist can be enlisted they must remain as they are.

Mr. Webster has very beautifully mounted and displayed a number of specimens, among them a large black snake, a South American tortoise, and a specimen of *Heloderma horridum* received from the Zoological Garden.

FISHES.

As in previous years, so again this year, I have to report that very little has been done to increase the ichthyological collections of the Museum. No member of the staff is sufficiently acquainted with ichthyology to feel a profound interest in the subject, and the facilities for making local collections are very limited.

Mr. Webster has made a cast of a large skate donated to the Museum, in preparation for casting a model in gelatine.

MOLLUSCA.

Mr. Herbert H. Smith, during the few months of his stay with the Museum, went over the species representing the genus Partula contained in the collection of Dr. W. D. Hartman, the acquisition of which was mentioned in my last Annual Report. Mr. Smith prepared, and there has been published in Vol. 1, of the Annals of the Museum a valuable report upon this portion of the Hartman collection, favorable notices of which have appeared in the scientific reviews.

Our collection of Mollusca is very large, and a proper arrangement and classification of the material, which we possess, will occupy much of the time of the Curator of Invertebrate Zoölogy, whose services will be available on and after July 1st of the present year. A number of minor acquisitions have been made to the collection by gifts, and to some extent by purchase. There are at the present time probably fifteen thousand species of shells contained in the collection.

INSECTS.

Two purchases of notable collections have been made during the past year. From Mr. Henry Engel, we bought his entire collection of lepidoptera, consisting mainly of a series of species found in Western Pennsylvania, together with a considerable number of species representing other North American localities. The collection also contained a number of desirable exotic species. From Mr. Henry Klages, of Jeannette, Pa., we have purchased his entire collection of exotic beetles, representing in the neighborhood of five thousand species, mostly large and showy, well adapted to purposes of exhibition in the Museum.

For a short time Mr. Herbert H. Smith devoted himself to the collection of the microscopic lepidoptera of the vicinity, and a small series of neatly prepared specimens representing these forms was secured. It is very desirable, as this region has never been thoroughly explored for these minuter insects, that this work should be carried on systematically.

The entire collection of insects belonging to Mr. Herbert H. Smith has been turned over to the Museum. It includes a vast amount of material, which should be studied and reported upon.

Mr. William Ashmead, of the United States Museum, has submitted a report upon the Chalcidoidea of South America included in the collection, and this important paper is now in the hands of the printer and will appear as Memoir No. IV of the Carnegie Museum.

Portions of the Entomological collections belonging to the Museum have been assigned to specialists for study, and we may confidently expect in the coming years valuable publications from these sources.

The Entomological Society of Western Pennsylvania, which numbers about thirty members, has held regular monthly meetings at the Museum. A List of the Lepidoptera of Western Pennsylvania for publication in the Annals, is in course of preparation by a committee of the Society.

CRUSTACEA, ETC.

But few additions have been made to our collection during the past year. The addition to our staff of Prof. A. E. Ortmann, who is one of the highest of living authorities in this department of study, will no doubt lead to the collection of much valuable material and to the determination of a considerable mass of unclassified specimens, which we have in our possession.

BOTANY.

More material has been added to the collections in this section during the year just closed than in any like period since its establishment.

The generosity of the authorities of the New York Botanical Garden was exemplified when in September, by an arrangement of the Director with Dr. N. L. Britton, Mr. Shafer was given permission to select unlimitedly from the duplicates of that institution. This gift, comprising several thousand sheets, contains species from all parts of the world, among them many of additional value for their association with older botanists of renown.

A fine series of Pringle's Mexican plants, covering some ten years collecting, was purchased. Sets of Hall and Chandler's California plants and Nelson's Rocky Mountain plants were obtained in like manner. Dr. Robinson of the Gray Herbarium of Harvard University honored us with a first century of the plants

to be distributed by that institution. Mr. Wm. M. Canby of Wilmington, Del., contributed a fine series of Delaware *Crataegi* (just described by Prof. Sargent), together with many plants from various other localities. Rev. G. A. Eifrick of Cumberland, Md., continued his contributions of plants pursuant to his intention to place with us a complete representation of the Maryland flora. Mrs. D. C. Clapp presented a series of plants collected in Maine by herself. Messrs. Earl Douglas and C. W. Gilmore of the paleontological force contributed small, but interesting, collections of plants from Montana and Wyoming. Professor W. A. Kellerman of Columbus, Ohio, continued his contribution of Ohio fungi.

The Pennsylvania Herbarium has progressed at about the same rate as the General Herbarium. The gift of the New York Botanical Garden already mentioned provided many species of Pennsylvanian plants representative of the flora of several eastern counties heretofore scantily represented. Many of Mr. Canby's contributions, already mentioned, belong to the flora of this state. From Mr. B. H. Smith of Philadelphia many Delaware County species were obtained. Rev. S. W. Knipe of Oceanic, N. J., kindly permitted Mr. Shafer to select from his herbarium a very representative series of Monroe County plants, also some of the rarer ones of western Pennsylvania, especially such of Allegheny County as have approached, if not actually reached, extermination. Miss Catherine R. Holmes of Allegheny city contributed a very representative collection from Westmoreland County, collected in the northwesterly townships. Mr. Shafer collected in several of the western counties, but the number of plants, as well as the number of "new" counties touched, was less than last year. Through an arrangement of the Director with Professor D. R. Sumstine of Kittanning, Pa., we secured a fairly representative collection of western Pennsylvania fungi, among them several species new to science, it is thought. These, like all of our fungi, are now arranged in multiple boxes according to a system recently adopted by advanced herbaria, and which proves highly satisfactory.

Many smaller contributions have been receiyed into both the general and State herbaria, but owing to the departure of Mr. Shafer on an extended collecting trip to Cuba, specific mention

of these is impossible. Due acknowlegment, however, is given in the accession list accompanying this report.

The seed collection was considerably augmented by the collections of Mr. Shafer while visiting the New York Botanical Garden, the Arnold Arboretum, and the Cambridge Botanical Garden last fall. The Director purchased a representative set of the cones of the coniferous trees of the Pacific slope. A few minor contributions have been received from various persons.

The number of species mounted has fallen slightly below that of last year, owing to the aptitude of the assistant, Miss Kinzer, for other work, such as drying, labeling, and distributing specimens, much to the relief of the Custodian, whose time has been greatly occupied in the accumulative and constructive phases of work in the herbarium.

MINERALOGY.

During the past twelve months the mineralogical collections have increased more than in all the previous years of the existence of the Museum.

Mr. Douglas Stewart, the Custodian of the collection of minerals has labored very efficiently in arranging and classifying the material which was on hand at the beginning of the year, and which has since been acquired. The collections are divided into three classes: the systematic collection, in which the specimens are arranged according to chemical composition; the collection of gems; and the collection of economic minerals and geological specimens. In the first class the Museum has acquired by purchase a systematic collection of one thousand and ninety specimens, increasing the number of species in the Museum by more than half, and making the total number of species in this collection five hundred. Another addition has been a collection illustrating crystallization, containing one hundred specimens, and covering the enire subject of crystallography. Neither of these collections has as yet been put on exhibition. Ten very large specimens have been donated by Mr. George L. English of New York, which are all fine and particularly good additions to the exhibition series, in which class there are at the present time six hundred and eighty-one specimens.

In addition to the collections before mentioned we have received a very good collection from the Rev. DeL. Juny of one hundred and sixty specimens, and we have received from the Misses Sawyer a collection approximating three hundred specimens, which has not yet been labeled.

The most notable addition during the year has been the collection of gem-stones made by Mr. J. L. Lewis, and mentioned in the Director's last Annual Report. This has been unpacked, carefully labeled, and placed on exhibition. The collection contains about two thousand and six hundred specimens, exclusive of a great number of fresh-water pearls and pearl-bearing shells. The only other gems in the collection of the Museum prior to the acquisition of this assemblage of specimens were a small number contained in the oriental collection purchased from Mr. Hanna.

In response to the letters sent to different firms last spring we have received a number of collections which will add very materially to the economic exhibit. Among them I may mention a fine collection of copper ores from the Copper Queen Mining Company of Bisbee, Ariz.; another collection from the Calumet & Hecla Company on Lake Michigan; an interesting collection of the ores of mercury from B. M. Newcombe of Oak Hill, Cal.; a collection of fluor-spar from the Kentucky Fluor-Spar Company; a collection of zinc ores from Blue & Nunn, Kentucky; a collection of zinc ores from the New Jersey Zinc Company; a collection of asbestus from Henry M. Engel, and a very complete collection of materials and finished products from the Pennsylvania Salt Manufacturing Company of Pittsburgh; also a collection of the ores and finished products of antimony from Mathison & Company of New York, and a collection of mica specimens.

The entire systematic collection before mentioned and the collection of crystals have been unpacked, arranged on storage shelves, and card-catalogued, so that they can be placed on exhibition as soon as sufficient space has been provided.

GEOLOGY AND PALEONTOLOGY.

The Director has sanctioned an arrangement under which Mr. J. B. Hatcher shall at his convenience endeavor to thoroughly investigate the geological formations in the immediate vicinity of Pittsburgh, with a view of hereafter publishing under the auspices

of the Museum a handbook or guide to the geology of the district, properly illustrated, and suitable for use by students in schools and colleges. Mr. Hatcher last June was granted permission to accompany an expedition sent out by the United States Geological Survey in order to conduct certain preliminary researches in the region of the Rocky Mountains. Like permission has been granted to him this year to devote some weeks to rendering assistance to the Survey.

The paleontological researches carried on by the Museum with the help of the special fund provided by Mr. Carnegie have been prosecuted with great vigor during the past twelve months and have been attended by phenomenal success. Four field-parties were employed in collecting fossil vertebrates from the Tertiary and Mesozoic formations of the West during the summer of 1902. One party, in charge of Mr. O. A. Peterson, aided by Mr. A. W. Vankirk, labored in the Tertiary deposits of Sioux County, Nebraska, and in the Laramie beds of Converse and Weston Counties, Wyoming. Another party, under Mr. C. W. Gilmore, continued the explorations for Jurassic reptiles, which have for several years past been carried on with signal success in southern and central Wyoming. Another party, with Mr. W. H. Utterback in charge, was occupied in taking up the skeleton of the colossal dinosaur discovered in the Jurassic deposits on the eastern flank of the Big Horn Mountains in Wyoming. A fourth party, under Mr. Earl Douglass, undertook the exploration of the Tertiary lake-basins of western Montana. All of these parties succeeded in realizing our best expectations, and returned to the Museum exceedingly valuable collections.

In the laboratory, under the direction of Mr. A. S. Coggeshall, substantial progress has been made, and in addition to the mounting of the nearly complete skeleton of Daphœnus, which has been placed on exhibition, many more or less complete skeletons of fossil reptiles and mammals have been freed from the matrix and prepared for study and exhibition.

By purchase we have acquired during the year several important collections, including the private collection of Mr. Earl Douglass, containing about sixty type specimens; a large series of early Devonian fishes from Scotland; a fine series of fishes and other vertebrates from the Solenhofen beds of Bavaria; a splendid

skeleton of an Ichthyosaurus from Würtemburg, besides other material of only a little less importance.

Mr. Douglass, who was engaged on June the 1st, 1902, as a research, laboratory, and field assistant, besides carrying on the researches committed to him in the region of the Tertiary lake basins of Montana, has prepared a paper upon these remains, which is now in press. Mr. Hatcher has prepared and in part published a number of important papers upon our collections, and others are being prepared, or are already in press. In order that these important scientific papers might be properly illustrated, on April the 1st, 1902, Mr. Sydney Prentice was engaged as a draftsman and has continued in that capacity to our entire satisfaction.

Mr. Hatcher, in addition to his administrative and literary work has catalogued the entire collection in his charge. There are over one thousand numbers in the catalogue, each number representing a different skeleton.

It is gratifying to know that the activities of the Museum in this field of research have attracted worldwide attention. His Majesty King Edward VII. on the occasion of a conversation with Mr. Carnegie last summer, suggested the hope that a suitable representation of some of the magnificent dinosaurian remains in the possession of the Carnegie Museum might be secured for the National Museum in London. Acting upon the suggestion of Mr. Carnegie, who has generously agreed to defray whatever expense may be incurred in the matter, the Director of the Carnegie Museum submitted to the Trustees of the British Museum a proposition to have made and to present to them a replica of the skeleton of Diplodocus. This proposition, which was laid before the Trustees of the British Museum on February the 23d, was formally accepted by them, and a special resolution was adopted tendering to Mr. Carnegie the thanks of the British Museum for his generous offer. Steps are being taken to execute Mr. Carnegie's wish. The work will necessarily consume considerable time and will involve considerable expense.

During the past year the collection of vertebrate fossils has been visited and studied by almost all of the paleontologists of America and by several specialists in this department of inquiry from the old world.

The collection of reference books relating to paleontology has been materially increased during the past year, and by moderate

annual expenditures in the coming years it is hoped to provide for this department, as well as for the other departments, good collections of such books as are needed for immediate reference and which should be at hand at all times in order to enable the work of study and investigation to be carried on successfully.

COMPARATIVE ANATOMY AND OSTEOLOGY.

Aside from the work that has been done in the section of Zoological Preparation in cleaning and partially preparing for mounting a large number of skeletons, nothing has been done during the past twelve months which calls for special comment in this report. Our osteological collections are slowly increasing, but owing to the entire lack of room in which to display what we already possess we have been kept from undertaking work, which otherwise it would have been a pleasure to perform.

ETHNOLOGY AND ARCHAEOLOGY.

The work of making models to be used in the ethnological collection has been carried on steadily by Mr. Theodore A. Mills, under the immediate supervision of the Director. A number of valuable additions to our collections of archaeological specimens illustrative of the ancient American civilizations have been received. From Mr. James B. Oliver we obtained a very choice and interesting collection of ancient Indian pottery collected in Utah, which was purchased by Mr. Oliver, and kindly donated to the Museum. We have obtained by purchase a number of interesting Mexican antiquities. The entire collection of Mr. Harper, which has long been on exhibition in the Museum as a loan, was acquired by purchase from his executors. An important collection of Indian basketry was obtained through the agency of Mr. George Wharton James. From the Congo Free State we have secured through Mr. Walter Karl of Matadi, a very interesting collection illustrating the arts of the natives of that region.

From the Directors of the Egypt Exploration Fund in London, we have received a small and interesting collection of specimens obtained at Abydos.

Mr. C. V. Hartman has been appointed as Curator of Ethnology and Archaeology. Mr. Hartman, who, it may be incident-

ally mentioned, bears an honored name, being the son of the most famous of recent Swedish botanists, who holds in his own country a position comparable to that which was held by the late Professor Asa Gray in this country, was the associate of Professor Karl Lumholtz in his ethnological and archaeological investigations in Mexico. He is the author of a magnificent work upon the antiquities of Costa Rica, published by the Royal Geographic Society of Sweden. Mr. Hartman, acting under the instruction of the Director, after conference with him, has been deputed to make some further investigations in the Central American countries, with a view to the acquisiton by this Museum of material illustrative of the ancient Aztec civilizaton, as well as of the natural history of these countries.

NUMISMATICS.

We have not been as highly favored during the last year as we were the year before in the receipt by gift of important collections. Nevertheless, a number of minor acquisitions have been made. Mr. Magnus Pflaum, the Honorary Curator of Numismatics, has kindly consented at his leisure moments to arrange and catalogue, at least in part, the large collections which we already possess, and steps looking to the consumation of this arrangement are being taken.

THE MUSEUM LIBRARY.

Owing to the generosity of the founder and the increased appropriation at our disposition we have been enabled during the past year to purchase to a greater extent than in any former year books of reference which were indispensably needed for our staff. Books in the domain of scientific research are tools, and it is not enough that they should be accessible somewhere in the vicinity of a working museum, but they should be so placed as to be immediately accessible when wanted. The Director has authorized the distribution in part of the books belonging to the library of the Museum to the study rooms in the various sections, so that the curators and custodians may be able to carry on their work without the necessity of wasting time and trying their patience by the slow process of going through the formality of borrowing from the central collection. The curators and custodians are made responsible for the books committed to their charge.

THE ANDREW CARNEGIE NATURALISTS' CLUB.

This popular organization of the lads of the city is in a flourishing condition. It has served to awaken in the minds of a multitude of the young people an intelligent interest in research, and many of those who were early members of the Society and who are now prosecuting their studies in various schools and colleges show by the lines of study which they are pursuing and by the success which they are achieving the powerful formative influence of this pleasant association. It may confidently be expected that in future years there will in part through this agency be developed in our great community a number of young naturalists of positive ability.

THE PRIZE ESSAY CONTEST.

The Prize Essay Contest continues to be held under substantially the same conditions as have prevailed in former years. Between eight and nine hundred pupils in the schools submitted essays in competition last December. Our profound thanks are due to the ladies and gentlemen who consented to serve as judges in the Contest. Many of them have been in this service since the enterprise was initiated. The effect of the Contest has been stimulating to a high degree, and has led multitudes of both young and old to resort to the halls of the Museum, where the collections have been intelligently and earnestly studied.

OUR DEBT TO THE RAILWAYS.

We are constrained again this year, as in former years, to publicly acknowledge our great indebtedness to the railways of America for repeated kindnesses shown to us, both in furnishing free transportation for members of our staff in going to and coming from their fields of labor in distant parts of the country, and in providing free transportation for large collections which have been made. Among those whose generosity in this connection should be specially remembered are Mr. R. Pitcairn and Mr. James McCrea of the Pennsylvania Railway System; Mr. Marvin Hughitt, President of the Chicago & Northwestern Railway Company; Mr. E. P. Ripley, President of the Atchison, Topeka & Santa Fe Railway Company; Mr. Horace G. Burt and Mr. A. G. Darlow of the Union Pacific Railway Company, Mr. A. J. Earling, President of the Chicago, Milwaukee & St. Paul

Railroad Company, and Mr. James J. Hill of the Great Northern Railroad Company, all of whom with signal kindness have endeavored to aid us in our efforts to promote scientific knowledge.

HISTORICAL COLLECTIONS.

The intended transfer by the authorities of the United States and of the Pennsylvania Society of the Sons of the American Revolution of the historic cannon which were for many years at the Allegheny Arsenal, has been consummated. The occasion of the transfer was made the opportunity for a civic gathering in the large Music Hall on the evening of May the 23d, 1902. A notable address was delivered by Hon. John Dalzell, representing the Congress. Mr. Dalzell officially turned over the cannon to the custody of the Pennsylvania Society of the Sons of the American Revolution, who in turn through their President, Mr. Wm. L. Jones, delivered them to the Director of the Museum, who responded on behalf of the institution. These cannon were cleaned, and have been properly mounted, and are on exhibition at the foot of the main stairway of the Institute.

A large number of minor accessions illustrating local history have been given into the custody of the Museum either by gift or as loans.

The publication of the Records of the old Virginian Courts, which has been begun in the Annals and will be continued, has attracted much attention, and we are in receipt of many requests from all over the country for copies of these publications by those who are interested in historical and genealogical research.

THE TRANSPORTATION EXHIBIT.

The work of constructing models illustrative of the development of transportation has been carried on more or less continuously during the past year, and there have been added to our collections quite a number of separate objects and of groups of objects, the latter principally constructed by Mr. Theodore A. Mills, and Mr. Wilson Banks, which serve not only to interest but to instruct. This work will be steadily continued.

CIRCULATING COLLECTIONS.

There has been continuous demand for the circulating collections of birds, insects, and minerals prepared in the Museum

and intended to be loaned to schools. These collections are constantly in use in the schools, and from many sources we have received expressions of gratitude for the great help which is by them afforded to those who are engaged in the study of nature.

PUBLICATIONS.

The first volume of the Annals has been completed, and the first part of the second volume is in press. Memoirs 1, 2, and 3 have been published, and Memoir No. 4 is in press. Material sufficient to complete Volume 2 of the Annals is in hand, or in process of preparation. Most gratifying and appreciative reviews of the publications of the Museum have appeared in various scientific journals on both sides of the Atlantic. We have entered into relations of exchange with a very large number of kindred institutions throughout the world, who in return for our publications are sending us their Reports, Proceedings, and Transactions. It is hoped to still further enlarge our relations of exchange and in this way to build up our collection of current scientific literature.

SUGGESTIONS FOR THE ENSUING YEAR.

The near approach of the time when, after long deferred hope we may expect to take up the erection of the additions to the present building, provision for which has been made by Mr. Carnegie, necessitates the careful consideration of all matters bearing upon the detailed plans for the new structure. One of our wants when we come to enter the new building will be an abundance of cabinets and exhibition cases, in which to display the treasures which we have been steadily amassing. It is a matter of gratification to the Director to be able to report a substantial balance in the Museum fund at the end of the present fiscal year. This balance, and large additions to it, will be needed in order to secure furniture and other appliances in the new structure, and the Director sincerely hopes that this department may be allowed to accumulate a fund for this purpose.

The Chairman of the Museum Committee, the Director of the Museum, and the Curator of Paleontology united in addressing to the Trustees of the Carnegie Institution in Washington a memorial requesting that institution to coöperate with us in making certain investigations which would tend to prove or disprove the hypothesis of a former land connection between the Antartic

continent and the continental masses nearest to it. We requested an appropriation from the institution for this purpose. The Advisory Committee of the Carnegie Institution reported very favorably upon the proposition, as may be seen by a reference to the first volume of the Yearbook of the Carnegie Institution, which has just issued from the press. The Director of the Museum is informed officially by the Secretary of the Carnegie Institution that at the last meeting of the Trustees of that body action upon all requests for grants of considerable amounts was deferred. We are not without hope that these two institutions, the Carnegie Museum and the Carnegie Institution in Washington, boh created in some respects for practically the same ends, may be enabled to harmoniously coöperate in this enterprise, which is believed to be of the highest scientific interest and importance. The question of the origin and distribution of existing forms of animal life will have much light thrown upon it by the successful execution of our plans, as we confidently believe. No more capable man for carrying on such investigations than Mr. J. B. Hatcher could be found. His many years' experience in Patagonia, his thorough familiarity with the geology and paleontology of Patagonia and Tierra del Fuego, are universally admitted, his splendid researches the results of which are being published by the J. P. Morgan Fund of Princeton University, establish beyond a doubt his peculiar fitness for the task which has been suggested. It is hoped that during the coming year substantial progress may be made in carrying out our plans for this important scientific undertaking.

Our work so far as the internal affair of the Museum are concerned during the coming year will largely consist in prosecuting purposes which have already been carefully and thoughtfully matured for the building up, the arrangement, display, and study of the collections which have already been commenced. Our plans have been laid out on broad lines and their execution calls for wisdom and patience. Our greatest need at the present time, in addition to the matters which have already been alluded to, is the appointment to our working force of additional men who may take up the tasks which will inevitably present themselves as our work grows and our assemblages of specimens increase. We should have a material strengthening of the force engaged in the Section of Preparation, and we should secure as soon as possible a competent Curator for the Section of Recent Vertebrates.

FINANCIAL STATEMENT

OF THE

CARNEGIE MUSEUM, PITTSBURGH, PENN'A.

April 1st, 1892—April 1st, 1903.

GENERAL FUND.

RECEIPTS.

1902.		
April 1.	To Balance on hand.....$	15.09
" 15.	" Annual Appropriation.....	49,000.00
1903.		
Mch. 31.	" Sundry Refunds and Proceeds of Sales..	69.71
	Total ..... $	49,084.80

DISBURSEMENTS.

March 31, 1902:—

By Salaries	$17,563.98
" Paid for Labor	50.00
" Repairs to Exhibition Cases	23.72
" " " Furniture	8.60
" Office Supplies, Stationery, etc.,	137.14
" Postage, Telegrams, etc.,	184.95
" Expressage, Freight and Drayage	499.00
" Insurance on Egyptian Boat and House	38.00
" Custom House Charges	2.60
" Thaveling Expenses and Car Fares	183.45
" Laboratory Supplies	147.20
" Photographic Supplies	28.56
" Herbarium Supplies	251.53
" Alcohol, Drugs, etc.,	136.19
" Material and outfit for Collecting	30.00
" Insect Pins	34.55
" Labels	47.36
" Storage (Rental)	15.25
" Dues as Member of Museum Association	5.22
" Telephone	165.40
" Packing and Unpacking	24.55
" Expenses of Prize Essay Contest	367.88
" Publications	2,782.64
" Books Purchased	1,956.58
" Binding Books	6.25
" Framing Pictures	11.42
" Tools	99.12
" Laboratory Fixtures	70.90
" Photographic Apparatus	180.80
" Boxes, Trays, and Storage Cases	897.75
" Office Furniture, Typewhiters, etc.,	203.55
" Exhibition Cases	3,416.20
" Collections purchased	14,928.51
Total	$44,498.85
Balance on hand	4,585.95
	$49,084.80

PUBLICATION FUND.

DR.

April 1st, 1902:—

To Balance on hand April 1st, 1902	$ 2.49
" Sundry Refunds	1.75
" Cash received from General Fund at sundry times to meet contracts	2,782.64
" " from Fossil Fund	144.93
Total	$ 2,931.81

CR.

By Paid Murdoch, Kerr & Co., Prize Essay Report 1901	$ 135.50
" " Annual Report, 1902	175.00
" " New Era Printing Co., for printing Annals, Vol. 1, Pts. 3 and 4, and Memoirs, No. 1	724.70
" " Miss L. L. Howenstein for Drawings	125.00
" " Miss Mina Lynch, Transcribing	25.20
" " Packing and Forwarding	32.65
" " J. C. Bragdon, Engraving	459.52
Total	1,532.64
Balance on hand to meet contracts for publications in press	$ 1,254.24

STATEMENT OF THE CONDITION OF THE SPECIAL FUND PROVIDED BY MR. ANDREW CARNEGIE FOR PALEONTOLOGICAL RESEARCH.

DR.

April 1, 1903:—	
To Balance on hand, April 1, 1902	$ 8,591.03
" Cash from Sale of Books	155.73
" Interest on Daily Balances	108.17
" Sundry Refunds (Field Expenses)	9.90
" Cash rec'd from Mr. Carnegie, Feb. 4, 1903	10,000.00
Total	$18,864.83

CR.

By Salaries of Staff (Eight Men)	$ 6,485.00
" Field Expenses, April 1-Nov. 1, 1902, (4 parties)	2,650.00
" Laboratory Supplies	334.80
" Tools	150.97
" Office and Cataloguing Supplies	142.80
" Traveling Expenses	60.00
" Freight	19.40
" Illustrations for Publications	144.93
" Books Purchased	159.59
" Sundry Collections Bought	760.43
Total	$10,907.92
Balance available for research to Dec. 31, 1903	7,956.91
	$18,864.83

REPORT OF THE ACCESSION OFFICER.

CARNEGIE MUSEUM, PITTSBURGH, PA.
April 1st, 1903.

DR. W. J. HOLLAND, Director.

Dear Sir:—I herewith transmit to you a list of the accessions which have been made to the Carnegie Museum in its several departments of activity during the fiscal year, which has just closed. Trusting that you may find that the list is correct, and that it accords with the records kept in your office.

I am very sincerely yours,

J. A. SHAFER,
Accession Officer.

PERMANENT ACCESSIONS TO THE CARNEGIE MUSEUM.

April 1, 1902, to April 1, 1903.

Unless otherwise stated the objects have been donated.

Aldrich, Hon T. H., Birmingham, Ala. (Through H. H. Smith.) Set of fresh-water shells from Rome, Ga. Aug. 2, 1902 . . . . . (2060)

Atkinson, Dr. D. A., Pittsburgh. *Hyla carolinensis* (two specimens), Raleigh, N. C.; embryological remains, Fern Hollow, Allegheny County, Pa., Sept. 11, 1899; eggs of *diemictylus viridescens,* ten specimens, Carnegie, Pa.; *Hyla andersoni,* Chester, Pa., May 15, 1899. March 3, 1902. . . . . (2224)

Bacon, S. E., Erie, Pa. Cooper's Hawk. June 24, 1902. . . . . (2039)

Baker, Henry, Yarmouth, Nova Scotia. Fourteen birds from Nova Scotia: Red-breasted Merganser, Old Squaw Duck, Golden-eye Duck, American Eider (two specimens), Horned Grebe, Black-bellied Plover (eight specimens). June 20, 1902. . . . . (2038)

Blakeley, Col. Archibald, Pittsburgh. Section of a tree that stood thirty-five yards in front of the battle line of the 78th Regiment of Pennsylvania Volunteer Infantry, Col. Blakeley commanding, in the Brotherton Woods, Battle of Chickamauga, Sept. 19th and 20th, 1863. Oct. 15, 1902. . . . . (2105)

Blue & Nunn, Marion, Ky. Four photographs of mine four miles west of Marion, Ky. April 8, 1902. . . . . (2007)

Blue & Nunn, Marion, Ky. Ores of zinc, (17 specimens.) Oct. 15, 1902. . . . . (2098)

Botanical Society of Western Pennsylvania, Pittsburgh. Specimens of conifers used at the December meeting of the Society. Jan. 7, 1903. . . . . (2187)

Boulton, Mrs. Daniel H., Franklin, Pa. Shells from Marco Island, Fla. (21 specimens.) April 29, 1902. . . . . (2016)
Archæological specimens from Marco Island, Fla. April 29, 1902 . . . . . (2017)

Brinker, H. J., Munhall P. O., Pa. Golden-penciled Hamburg hen, in the flesh—Fourth Prize, Pittsburgh Poultry Show, 1902. May 29, 1902.. .. .. .

Bock, Dr. (?) Engraving showing Gospel according to St. John, Chapter III., v. 16, designed and engraved in two hundred and fifty languages. March 27, 1903.. .. ..(2232)

Boyce, Rev. Isaac, Boyce Station, Pa. Ancient Mexican carvings. July 18, 1902.. .. ..(2054)

Campbell, Rev. Howard, Laos, Siam. Miscellaneous collection of objects from Siam. Feb. 2, 1903.. .. ..(2214)

Carriker, M. A., Jr., Lincoln, Nebraska. Birds from Costa Rica. (500 specimens.) Jan. 7, 1903.. .. ..(2180)
Mammal skins (ten specimens), representing four species, from Costa Rica. Jan. 7, 1903.. .. ..(2181)

Damon, Robert F., Weymouth, England. Collection of Devonian fishes from Scotland, selected by Dr. C. R. Eastman. Nov. 19, 1902.. .. ..(2148)
Skull of Ichthyosaurus. Jan. 21, 1903.. .. ..(2198)

Douglass, Earl, Carnegie Museum, Pittsburgh. Collection of Tertiary fossils, containing types. Dec. 6, 1902.. .. ..(2153)

English, George L. & Co., West 18th Street, New York, N. Y. Collection of crystals. (100 specimens.) Dec. 23, 1902.. .. .. ..(2153)

English, George L. & Co., New York, N. Y. Systematic collection of minerals containing 1090 specimens. Feb. 13, 1903.. .. .. ..(2220)

Ford, Mrs. Lois, Richmond Hill, N. Y. Feather robe; two seal bladder coats; from the Aleutian Islands. Oct. 15, 1902.. .. ..(2095)

Hall, H. M., Berkeley, Cal. Californian plants from Sierra Nevada Mountains, collected by Hall and Chandler, 1900 (360 specimens). Plants from North Coast Range, collected by Chandler, 1901 (210 specimens). June 20, 1902.. .. ..(2036)

Harper, Thomas, Estate of, Bellevue, Pa. The Archæological Collection of the late Thomas Harper. July 14, 1902.. .. ..(2049)

Hirase, Y., Kyoto, Japan. Japanese land shells. Aug. 20, 1902..(2074)
Japanese land shells. July 16, 1902.. .. ..(2053)

Holland, Dr. W. J., Pittsburgh. Common ground squirrel *(Tamias striatus)*, Franklin, N. Y. Oct. 16, 1902.. .. ..(2109)

Howell, Edwin E., Washington, D. C. Minerals (160 specimens), rocks (160 specimens), and duplicate unlabeled specimens. March 30, 1903.. .. ..(2233)

Hyett, William, Pittsburgh. Burmese figure made of yellow leather, taken from a temple. Obtained from Dr. Proctor, formerly of Cheltenham, England. March 23, 1904.. .. ..(2230)

James, George Wharton, Pasadena, Cal. Ethnological material from Havasupai Indians, Grand Canyon, Arizona. Oct. 31, 1902..(2128)

Johnston, A. J., Astoria, Oregon. Cones of the coniferous trees of the northwest Pacific slope. April 28, 1902.. .. ..(2015)

Karl, Walther, Matadi, Congo, Africa. Ethnological collection. Oct. 23, 1902.. .. ..(2120)

Krantz, F., Bonn, Germany. Collection of fossils, principally fishes. Dec. 20, 1902.. .. ..(2162)
Skeleton of *Ichthyosaurus acutirostris.* Jan. 21, 1903.. .. .. ..(2199)

Link, G. A., Carnegie Museum. Collection of skeletons. Dec. 23, 1902. .. ..(2170)

Micklish, J. H., Allegheny, Pa. Young harp seal, stuffed, from Labrador. Oct. 15, 1902.. .. ..(2088)

Minod, H., Geneva, Switzerland. Superior and inferior molars and premolars of *Lophiodon rhinocerodes*, var. *franconia*.. .. .. ..(2208)

Moore, Kenn, Uniontown, Pa. Three large stems entwined, collected on Cheat River. April 15, 1902.. .. ..(2012)

Nelson, Aven, Laramie, Wyoming. Collection of Wyoming plants. May 15, 1902.. .. ..(2020)
North American species of Antennaria. (57 herbarium specimens.) Nov. 29, 1902... .. ..(2150)

Pringle, O. G., Charlotte, Vermont. Collection of Mexican plants. Oct. 28, 1902.. .. ..(2112)

Robinette, Francis, Cochise, Ariz. One hundred birds from Arizona. March 16, 1903.. .. ..(2228)

Simpson, R. B., Warren, Pa. Lynx, taken at head of Blue Jay Creek, Forest County, Pa., by Jacob Goddell, Jan. 12, 1903. Jan. 28, 1903.. .. ..(2211)
Two Ring-billed Gulls *(Larus delawarensis)*, two Herring Gulls *(Larus argentatus)*, from Erie, Pa.; two Golden-eye Ducks *(Glaucionetta clangula americana)*, two Black-cap Chickadees *(Parus atricapillus)*, from Warren, Pa., Feb. 4, 1903.. .. ..(2217)

Sims, Claude E., Doverhill, Ind. Collection of Pentremites, about 115 specimens. Oct. 15, 1902.. .. ..(2087)

Smith, H. H., Carnegie Museum. Collection of fresh-water shells *(Strepomatidae)*, from Coosa River, Wetumpka, Ala., collected in October, November, and December, 1901; about 8,500 specimens. May 8, 1902.. .. ..(2019)

Schauburg, Baron Snouckaert Van, Doorn, Holland. Birds from Holland, mounted, 848 specimens, representing 209 species. Nov. 13, 1902.. .. ..(2143)

Thompson, H. A., Ennis, Montana. Slab containing crinoids. Jan. 31, 1903. . . . . (2212)

Ward's Natural History Establishment, Rochester, N. Y. Geological specimens. July 25, 1902. . . . . (2057)

Wilson, Karl D., Industry, Pa. Fox squirrel *(Sciurus ludovicianus neglectus)*. Oct. 23, 1902. . . . . (2111)

Worthington, W. W., Portland, Fla. Birds, 408 specimens, representing 58 species, from Portland, Florida, collected from November, 1902, to January, 1903. Feb. 2, 1903. . . . . (2215)
Collection of lepidoptera from Portland, Fla. . . . . (2215a)

CARNEGIE MUESUM STAFF. (Gifts, Collections, and Models.)

Banks, Wilson, Carnegie Museum. Model: Passenger coach as used on P. R. R. about 1857. Made in Museum laboratories, Nov. 4, 1902. . . . . (2136)

Carnegie Museum Expedition to N. E. America (Dr. D. A. Atkinson). Insects from Newfoundland and Labrador, collected in July, August, and September, 1901. April 29, 1902. . . . . (2018)

Clapp, George H., Pittsburgh. Collection of insects, Edgeworth, Pa. June 25, 1902. . . . . (2041)
Salamander from near Edgeworth, Pa., June, 1902. June 26, 1902. . . . . (2042)
Specimen of granite from highest point of Mt. Agamenticus, Me. Oct. 15, 1902. . . . . (2089)
Japanese wood-cut, description written in Japanese by a Buddhist priest. Jan. 7, 1903. . . . . (2178)
Collection of lepidoptera from Kennybunkport, Me., 600 specimens. . . . . (2178a)

Douglass, Earl, Carnegie Museum. (See Andrew Carnegie.) Plants collected in Montana, etc., summer of 1902. Nov. 29, 1902. . . . . (2151)
Lepidoptera collected in Montana in 1902. . . . . (2151a)

Gilmore, C. W., Carnegie Museum. Plants from Sheep Creek, Wyoming, collected in 1902, species. Dec. 8, 1902. . . . . (2155)
Lepidoptera collected in Albany and Carbon Counties, Wyoming, summer of 1902. . . . . (2155a)

Hatcher, J. B., Carnegie Museum. Bottle of oil and five specimens of oil-bearing sandstone discharged at shooting of oil well No. 29, on McDonald's farm, near McDonald, Pa. Well shot with 120 quarts of nitroglycerine; depth 2,800 feet. Nov. 7, 1902. . . . . (2141)

Holland, Dr. W. J., Carnegie Museum. Small birds (mainly hummingbirds), from Rio Janeiro, Brazil. (28 specimens.) Oct. 16, 1902. .. ..(2110)
Squid, caught at Magnolia, Mass. Dec. 20, 1902.. .. .. ..(2164)
("From unknown donor, city") Coral. Jan. 14, 1902.. .. ..(2192)

Kinzer, Miss Grace E., Carnegie Museum. Big Brown Bat, caught in Library building. Aug. 25, 1902.. .. ..(2080)
Various plants, collected summer of 1902. Jan. 8, 1903..(2191)

Link, Gustav A., Carnegie Museum. Black Duck *(Anas obscura)*, from Bear Run, Pa.; Great Gray Owl *(Scotiaptex cinerea)*, Feb. 1, North Dakota. Exchange. March 3, 1903.. .. ..(2225)

Mills, T. A., Carnegie Museum. Models made in Museum laboratories: (1) Section of Alaskan Innuit house, shore of Norton Sound. (2) A typical mail carrier of India. (3) Palm gatherers. (4) Wood sellers in Curaçoa. (5) Moving stone from one point to another with the handbarrow. (6) South African. (7) Piute Indian. (8) Hollander. (9) Swiss. Nov. 4, 1902.. .. ..(2137)

Peterson, O. A., Carnegie Museum. (See Andrew Carnegie.)

Pflaum, Magnus, Esq., Pittsburgh, Pa. Manganese ore. (Two specimens). March 12, 1902.. .. ..(2227)

Shafer, J. A., Carnegie Museum. Plants collected in Allegheny County, Pa., April and May, 1902. May 31, 1902.. .. ..(2028)
Cratægus material collected in Allegheny County, Pa., May, 1902. May 31, 1902.. .. ..(2029)
Plants collected at Ohio Pyle Falls, Fayette County, Pa., May 30, 1902. May 31, 1902.. .. ..(2030)
Plants from Center County, Pa., April, 1902. May 31, 1902. .. ..(2033)
Plants collected near Houston Junction, P. B. & L. E. R. R., Mercer County, Pa., July 17, 1902. Aug. 7, 1902.. .. .. ..(2065)
Seeds and fruit collected near New York City, mostly in the New York Botanical Garden. Oct. 23, 1902.. .. ..(2117)
Plants collected in the vicinity of New York City and Boston, Mass. Oct. 23, 1902.. .. ..(2118)
Seeds collected near Boston, Mass., mostly in Cambridge Botanical Garden and Arnold Arboretum. Oct. 23, 1902.. ,.(2119)
Plants and seeds collected in Washington, D. C., about Jan. 1, 1903. Jan. 7, 1903.. .. ..(2188)
Various fungi collected during 1901 and 1902. Jan. 8, 1903.(2190)
Allegheny County plants collected 1902. Jan. 14, 1903.. ..(2195)
Cones and seeds of *Picea Mariana* (Mill), B. S. P., taken from commercial "Christmas trees," Pittsburgh Market, December, 1902. .. ..(2205)

Shafer, J. A. and O. P. Medsger. Plants collected near Jacobs Creek and Mt. Pleasant, Pa., Aug. 10 and 11, 1902. Aug. 21, 1902. (2079)

Smith, H. H., Pittsburgh, Pa. Unios from Coosa River, Wetumpka, Ala. May 20, 1902.. .. ..(2021)
Various Allegheny County grasses, collected June and July, 1902. Aug. 21, 1902.. .. ..(2078)
Sloth, tortoise, small alligator (alive), small alligator (dried). All from Colombia, S. A. Dec. 26, 1902.. .. ..(2172)

Todd, W. E. C., Carnegie Museum. Birds, 91 specimens, representing 50 species, from Beaver County, Pa., spring of 1902. July 30, 1902.. .. ..(2059)
Specimen of *Lycopodium obscurum, Picea Mariana,* and *Abies balsamea,* from Clinton County, Pa. Dec. 12, 1902.. .. ..(2157)
Nine birds (eight species) from Beaver, Pa., September-December, 1902. Jan. 7, 1903.. .. ..(2179)
Set of two Great Horned Owls, from Iron Bridge, Armstrong County, Pa., March 5, 1902. March 9, 1903.. .. ..(2226)

Utterback, W. H. (See Andrew Carnegie.)

Webster, F. S., Carnegie Museum. Small piece of block tin from "Etta" furnace,, 1884—first year of extensive tin manufacture in the United States. Oct. 29, 1902.. .. ..(2123)
Six cocoons of *Thyridopteryx ephemeraeformis* on cedar twigs, collected by donor at Cabin John Bridge, Washington, D. C. Jan. 7, 1903.. .. ..(2183)
Two pieces of sandstone containing fossil Scolithus, collected by donor, Olney Ridge, Jan. 1, 1903, Washington, D. C. Jan. 7, 1903.. .. ..(2184)
Polypodium vulgaris, from Washington, D. C. Feb. 25, 1903. .. ..(2221)

Choffel, Frank, Conneaut Lake, Pa. Great Blue Heron *(Ardea herodias),* ♀, im.; Aug. 9, 1902, Conneaut Lake, Pa. Aug. 18, 1902.....(2071)

Clapp, Mrs. D. C., Edgeworth, Pa. Collection of plants from Kennybunkport, Me. Oct. 15, 1902.. .. ..(2091)

Copper Queen Consolidated Mining Co., New York, N. Y. Collection of copper ores. Oct. 15, 1902.. .. ..(2100)

Cornwell, W. K., Pittsburgh. One marmoset, ♀; Pernambuco, Brazil. Dec. 26, 1902.. .. ..(2173)

Cowperthwait, F., Pittsburgh. Piece of shell, and rifle barrel from Bouquet house, Bedford, Pa. Oct. 29, 1902.. .. ..(2124)

Davis, Dr. T. D., Pittsburgh. Four herbarium specimens of Pennsylvania plants. Dec. 12, 1902.. .. .. (2158)

Deane, Cecil R., State Capitol, Denver, Col. Corn calcined by lava heat, found in ruins of a Cliff-dweller's house, western New Mexico. Aug. 26, 1902.. .. .. (2081)

Decker, Omar H., Pittsburgh. Original survey of "Reserve Tract," opposite Pittsburgh, 1785, traced by J. H. Decker. Jan. 25, 1903. .. ..(2202)

Ebright, Fred, and Roy Oellig, Altoona, Pa. Great Blue Heron *(Ardea herodias)*, ô, im.; Lakemont Park, Altoona, Pa., Aug. 2, 1902. Aug. 4, 1902.. .. ..(2063)

Egypt Exploration Fund, Pittsburgh Branch. Antiquities from Fayum and Abydos. March 26, 1903.. .. ..(2231)

Eifrig, Rev. G., Cumberland, Md. Plants from the vicinity of Cumberland. June 20, 1902.. .. ..(2037)
Plants from Maryland. Oct. 23, 1902.. .. ..(2113)

Engle, Horace M., Roanoke, Va. Six specimens of asbestos. Oct. 15, 1902.. .. ..(2103)

English, George L. & Co., New York, N. Y. Ten large specimens of minerals. Feb. 13, 1903.. .. ..(2219)

Ewing, David, Pittsburgh. Reprints: (1) Confederate bond. (2) The Daily Citizen, Vicksburg, Miss., July 21, 1863; printed on wall-paper. Aug. 26, 1902.. .. ..(2083)

Fayette Mfg. Co., Pittsburgh. Magnesite, calcined magnesite, and magnesia brick, with cabinet for same. Aug. 18, 1902.. ..(2072)

Forse, Commander C. T., U. S. N., through Miss M. E. Forse, Pittsburgh. Six "Venus' flower-baskets," from Philippine Islands. Oct. 23, 1902.. .. ..(2121)

Frank, J. W., Allegheny, Pa. Lignite from Mexico. Feb. 18, 1903. .. ..(2223)

Fulton, Wm., Pittsburgh. Red bat *(Lasiurus borealis)*, ô, Pittsburgh, Pa. Aug. 17, 1902.. .. ..(2070)

Gray Herbarium of Harvard University, Cambridge, Mass. First century of *"Exsiccatae Grayanae"*—one hundred sheets of herbarium specimens. Oct. 29, 1902.. .. ..(2122)

Gilder, R. W., Century Magazine, New York, N. Y. A copy of the Washington medal, designed by Augustus Saint-Gaudens. Struck in 1889. Nov. 29, 1902.. .. ..(2152)

Hamilton, Dr. Wm. R., Pittsburgh. Small snake, Sparrow Lake, Ontario, Canada, where it is called copper snake and said to be full grown. September 6. 1902. Nov. 19, 1902.. .. ..(2149)

Hatry, Otto, Pittsburgh. *Botrychium Virginiana,* with forked fertile frond. June, 1902. Aug. 21, 1902.. .. ..(2076)
Allegheny County plants, viz.: *Conopholis Americana; Filix fragilis; Dryopteris Goldieana; Phegopteris dryopteris; Onoclea sensibilis.* Dec. 18, 1902.. .. ..(2160)

Heinz, H. J., Pittsburgh. Japanese pamphlet, magazine, and newspaper. June 28, 1902.. .. ..(2044)

Henk, Henry, Pittsburgh. Old axe found on grounds of Ft. Duquesne, July 20, 1900. Aug. 26, 1902.. .. ..(2084)
Hesselgesser, Willis, Leasuresville, Pa. American bittern *(Botaurus lentiginosus),* ô, Leasuresville, Pa. May 20, 1902.. .. ..(2023)

Hice, R. R., Beaver, Pa. Five photographic prints of pot-holes in Homewood sandstones at New Brighton, Pa. Oct. 16, 1902.. .. ..(2107)

Highland Park Zoological Garden, Pittsburgh. Two monkeys, male and female. Dec. 20, 1902.. .. ..(2166)
One African lioness. Dec. 20, 1902.. .. ..(2167)
Two beavers, male and female. Dec. 20, 1902.. .. ..(2168)

Holmes, Miss Katharine R., Allegheny, Pa. Plants from Westmoreland Co., Pa., herbarium specimens. Nov. 3, 1902.. .. ..(2134)

Hope, Herford, New Brighton, Pa. Three hymenopterous insects (Cimbex). June 20, 1902.. .. ..(2035)

Horne, Durbin, Pittsburgh. English coronation medal, description attached. Oct. 30, 1902.. .. ..(2127)

Hostetter, C. M., Pittsburgh. Lot of shells. July 9, 1902.. .. ..(2047)

Hostetter, Theo., Pittsburgh. Two pieces of wood from old log house, corner Water Street and Chancery Lane, Pittsburgh. July 18, 1902. .. ..(2053)

Howe, Wm. T., Pittsburgh. Two dollar note of the city of Pittsburgh. Oct. 15, 1902.. .. ..(2093)

Hyndman, Thos., Aurum, White Pine Co., Nevada. Thirty-one rattles of a rattlesnake, one beaver tooth, collected in Idaho and Utah. Oct. 29, 1902.. .. ..(2125)
Forty-six arrow-points (flint, obsidian, and one of iron), collected in Idaho and Utah. Oct. 29, 1902.. .. ..(2126)

Irwin, Wm. G., Pittsburgh. Shell taken from Spanish gunboat "Isla de Luzon," sunk in Manila Boy by Dewey, May 1, 1898. Nov. 4, 1902.. .. ..(2138)

Juny, Rev. DeL., Pittsburgh. Collection of shells. Dec. 27, 1902..(2174)
Collection of fossils. Dec. 27, 1902.. .. ..(2175)
Collection of minerals. Dec. 27, 1902.. .. ..(2174)

Keefer, Miss Iantha, Wilkinsburg, Pa. Specimen of *Epigaea repens* L., collected at Stewart Station, P. R. R., May, 1902. July 15, 1902.. .. .. .

MacCurdy, Prof. George Grant, Yale University, New Haven, Conn. Cast of fragment of cranium, constituting a portion of the type *Pithecanthropus erectus.* Dubois. Nov. 14, 1902. . . . . (2144)

Mathison & Co., New York City, N. Y. Specimens of Antimony, crude, and refined. Oct. 15, 1902. . . . . (2104)

McGee, J. W., McGee's Mills, Pa. Specimens of fossil echinoderms, sigillaria and peat, from McGee's Mills, Pa. Oct. 16, 1902. . . (2108)

McLure, Mrs. C., Pittsburgh. Three abalone shells; Santa Cruz. Oct. 15, 1902. . . . . (2094)

Medsger, O. P., Jacob's Creek, Pa. Herbarium specimens of plants collected on San Jacinto Mountains, California, 1901. April 8, 1902. . . . . (2008)
Seeds and cones of various plants. April 8, 1902. . . . . (2009)
Myotis lucifugus and *Pipistrellus subflavus,* from Delaney's Cave, Fayette Co., Pa.; eight specimens. Jan. 31, 1903. . . . . (2216)
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PITTSBURGH

ANNUAL REPORT OF THE DIRECTOR

FOR THE

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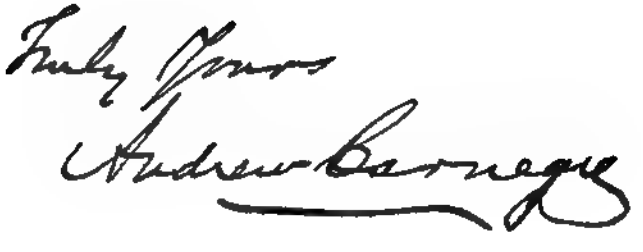
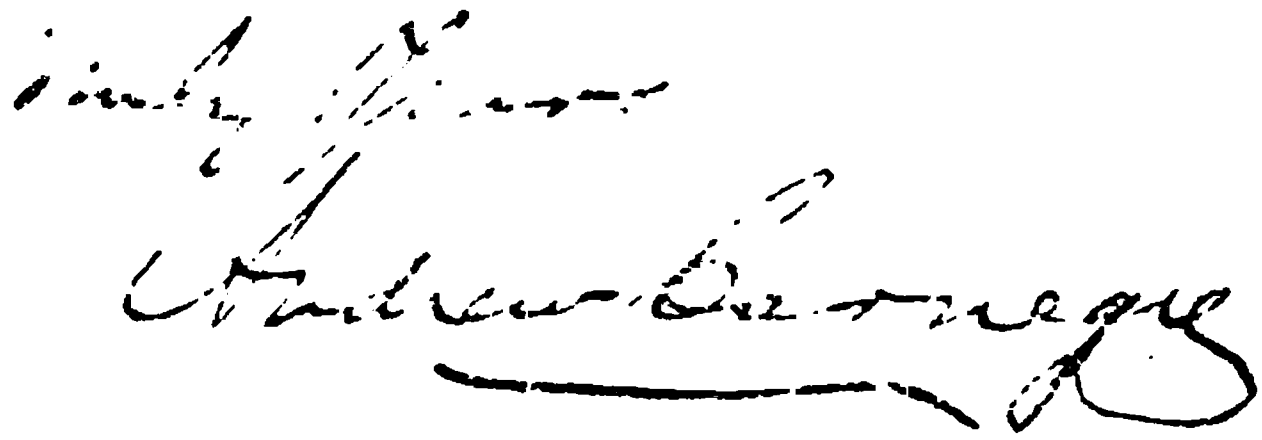
1904





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1904

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Hon. John D. Shafer,
Hon. James H. Reed.

DIRECTOR.

W. J. Holland, LL.D.

LETTER OF TRANSMITTAL.

MR. C. C. MELLOR,

Chairman of the Committee on the Museum of the Board of Trustees of the Carnegie Institute.

DEAR SIR:—I have the honor herewith to submit to you my report for the operations of the Carnegie Museum during the twelve months ending March 31st, 1904. Attached to the report you will find financial statements covering the operations of the fiscal year, which ends at this date, together with a detailed list of the accessions which have been received.

On behalf of the entire staff of the Museum permit me to express to you our sincere thanks for the unfailing courtesy which you and your colleagues in the Board of Trustees have shown to us during the past year.

I am,

Yours very sincerely,

W. J. HOLLAND, *Director.*

March 31st, 1904.

ANNUAL REPORT UPON THE CONDITION AND PROGRESS OF THE CARNEGIE MUSEUM IN PITTSBURGH.

Submitted March 31st, 1904.

By W. J. HOLLAND, *Director*.

Eight years ago the Museum entered upon its career in the possession of six rooms devoted to purposes of display and very limited quarters for its laboratories and study-rooms. It has absolutely outgrown the accommodations originally provided. We rejoice, however, in the prospect of being able in larger and more adequate quarters to carry on the work entrusted to us. The inconveniences, to overcome which our ingenuity at present is being taxed to the utmost, are being patiently and good-naturedly borne, because we know that the more than princely generosity of the founder has provided ultimate escape from these conditions, which would simply be unbearable without the hope of deliverance.

The Museum has come to be regarded as standing among the very first in the United States, both because of the scientific researches, which are here being carried on, and because of the general excellence of the collections which have been amassed, some of which illustrate certain of the truths of science as possibly they are nowhere else so well illustrated. It is a source of gratification to us to realize that at the present time the Museum is by competent authorities classed as one of the four most important institutions of its kind in America. In some respects it stands first. That the fame of the institution is more than local is attested in nothing more strikingly perhaps than in the daily mail of the Director, bringing requests for information and inquiries of all sorts from all quarters of the globe.

In my last report I stated that we had utilized almost every nook and cranny for the purpose of storing away material, which should have been in the hands of the staff for study. The necessities of the case became so extreme that it was finally resolved to rent a house for the purpose of placing there some of our collections which required immediate attention, and of furnishing working room for certain members of our force. The house, No. 419 Craft avenue, was accordingly rented early in October. Thither have been transferred the Herbarium, the mollusca and other invertebrates, exclusive of the insects, and portions of our ethnological material, more particularly the collections acquired during the past year in Costa Rica. The large brick stable on the rear of the lot affords storage space for certain material which is not immediately available for use. Here we are placing the molds, in which the reproduction of the skeleton of Diplodocus has been made, as fast as casts from these molds are taken. Here we have also placed a number of plaster casts intended to be ultimately utilized in the construction of groups of Indians. This step has given a measure of relief, but involves also a measure of hardship, because the house is somewhat remote from the Museum. The removal of the botanical collections to No. 419 Craft avenue has enabled the Director to place the room east of the lecture hall at the disposal of Mr. Hatcher and his associates, and to offer to Mr. S. H. Church, the Secretary of the Board of Trustees, the use of the small room, which heretofore has been occupied by Mr. Hatcher, as a place in which to carry on the work which falls upon him during the month or six weeks immediately antedating the celebration of Founder's Day. The most pressing necessity for more room is felt in the Zoölogical and Paleontological Laboratories. We are engaged at present in making a reproduction of the skeleton of *Diplodocus carnegii* for the British Museum, but we find our rooms in the Section of Paleontology entirely too small for the final assemblage of the parts, and it will therefore be necessary to secure the temporary use of some large hall or building in which this work can be done. In the taxidermic laboratory we are compelled at present to confine ourselves to the preparation of small groups and of individual pieces. It is impossible to undertake the setting up of any large groups because there is no space in the upper part of the building where

such groups can be placed, and such groups cannot be brought through the doors of the present laboratory rooms. When we had space to assemble large groups on the upper floors the present laboratory sufficed, but the room on the second and third floors having been exhausted, we are confined for the time being to lesser constructions.

PERSONAL PROPERTY, OR ASSETS, OF THE CARNEGIE MUSEUM, APRIL 1st, 1904.

The property of the Museum, acquired by gift, purchase, and through the labors of the Staff, is set forth in the accompanying tabular statement:

Collections purchased and made by the Museum, cost		$130,713.54
Collections donated, of which the cost to the donors is known		100,821.44
Exhibition Cases, cost		29,074.39
Furniture, cost		1,000.85
Boxes, Trays, Storage Cases, &c		3,823.07
Library:		
Books donated, estimated value	$2,240.00	
Books purchased, cost	6,174.91	
		8,414.91
Photographs, Paintings, and Frames		463.95
Photographic Apparatus		390.30
Herbarium Boxes, cost		741.10
Laboratory Fixtures, less ten per cent. for annual depreciation		948.58
Tools, less 10 per cent. for annual depreciation		620.36
Publications on hand for sale and exchange		3,900.00
Total		$281,112.49
Collections deposited with the Museum as Loans, valued at		40,000.00
Total		$321,112.49
Total value of collections given in Report, April 1st, 1903		$248,927.93
Increase in value during the year ending April 1st, 1904		$72,184.56

VISITORS.

The records of attendance at the Museum show that there has been no diminution whatever in the number of those resorting to our halls. During the past twelve months every State in the Union and almost every foreign country has been represented on the Visitors' Register. A number of eminent and distinguished scientific men have visited us, either when passing through the city as tourists, or coming for the especial purpose of studying and investigating the collections in our custody. Tested by the numbers of those who have visited the institution we have no reason whatever to think that its popularity, either as a center of instruction or of refined entertainment, is on the wane, but, on the contrary, interest is manifestly increasing.

THE STAFF.

Mr. J. A. Shafer, who for several years was the Custodian of the botanical collections, left the Museum in the month of November in order to accept a position as one of the custodians in the Herbarium of the New York Botanical Garden in Bronx Park. The place made vacant in this way has been filled by the appointment of Mr. Otto E. Jennings, a graduate of the Ohio State University, who for two years and more has been acting as the assistant of Professor W. A. Kellerman in the Herbarium of the Ohio State University.

Mr. Henry Klages has been employed since the beginning of the summer, 1903, as an assistant in the Section of Entomology.

Mr. Norman H. Boss, who last year was reported as an assistant in the Section of Paleontology, and who proved himself to be faithful and efficient, is no longer in our service, having accepted a position elsewhere.

Mr. Percy E. Raymond has been employed to take charge of the collections of invertebrate fossils. Mr. Raymond is a graduate of Cornell, and has pursued postgraduate studies in paleontology and geology both at Cornell and at Yale. He combines considerable experience as a collector and preparator with thorough technical training.

Mr. A. C. Silberling has been employed as a field collector in the Section of Paleontology.

The names of those persons who have been connected with the Staff of the Museum during the past year, for the whole or any portion of the time, are given in the appended list:

Dr. W. J. Holland, Director and Curator of Entomology.
Rev. A. A. Lambing, Honorary Curator of Historical Collections.
Mr. George H. Clapp, Honorary Curator of Conchology.
Mr. Magnus Pflaum, Honorary Curator of Numismatics.
Mr. J. B. Hatcher, Curator of Paleontology and Osteology.
Mr. C. V. Hartman, Curator of Archæology and Ethnology.
Mr. A. E. Ortmann, Curator of Invertebrate Zoölogy.
Mr. Percy E. Raymond, Assistant Curator in charge of Invertebrate Paleontology.
Mr. Douglas Stewart, Assistant in the Office of the Director, Custodian of the Mineralogical Colections, and Accession Officer.
Mr. J. A. Shafer, Custodian in charge of the Botanical Collections.
Mr. Otto E. Jennings, Custodian of the Botanical Collections.
Mr. W. E. C. Todd, Custodian in charge of the Collections of Recent Vertebrates.
Mr. Hugo Kahl, Custodian in the Section of Entomology.
Mr. F. S. Webster, Chief Preparator in the Section of Zoölogy.
Mr. Arthur S. Coggeshall, Chief Preparator in the Section of Paleontology.
Mr. Earl Douglass, Assistant in Research, Field and Laboratory, in the Section of Paleontology.
Mr. Sidney Prentice, Draughtsman in the Section of Paleontology.
Mr. O. A. Peterson, Field Collector and Assistant in the Laboratory in the Section of Paleontology.
Mr. Theodore A. Mills, Modeler and Sculptor in the Section of Ethnology.
Mr. C. W. Gilmore, Field Collector and Assistant in the Laboratory in the Section of Paleontology.
Mr. Louis S. Coggeshall, Assistant Preparator in the Section of Paleontology.
Mr. W. H. Utterback, Field Collector and Assistant Preparator in the Section of Paleontology.
Mr. A. C. Silberling, Assistant Preparator in the Section of Paleontology.
Mr. A. W. Vankirk, Assistant Preparator in the Section of Paleontology.

Mr. J. L. Lockwood, Assistant Preparator in the Section of Zoölogy.
Mr. Gustav A. Link, Assistant Preparator in the Section of Zoölogy.
Mr. Wilson Banks, Modeler.
Mr. Henry Klages, Assistant in the Section of Entomology.
Mr. Louis H. Townsend, Assistant in the Taxidermic Laboratory, Section of Zoölogy.
Mr. W. W. Worthington, Field Collector in the Section of Zoölogy.
Mr. J. A. Munsen, Assistant in the Section of Archæology and Ethnology.
Miss Grace Kinzer, Assistant in the Section of Botany.
Miss M. J. Stribling, Stenographer.
Mrs. Elizabeth Courtney, Stenographer.
Miss Clara L. Hillman, Assistant in the Office.
Norman H. Boss, Assistant in the Section of Paleontology.
Andrew J. Hall, Messenger.

The salaries of the gentlemen employed in the Section of Paleontology, with the exception of the Curator of that Section, are provided from the fund given by Mr. Carnegie for Paleontological research.

In addition to the persons mentioned as belonging to the Staff, Messrs. Serafino Agostini, Emil Poli and Manno Fabri have been employed by the Director in working upon the reproduction of Diplodocus. Their salaries have likewise been provided for by a special fund given by Mr. Carnegie.

The Director desires in this connection to express his appreciation of the general excellence of the service rendered the institution by the members of the Staff and other employes, and the good nature with which they have continued to endure the narrow quarters, the inadequacy of which has been commented upon in this as well as in previous annual reports.

COLLECTIONS.

The collections of the Museum have been greatly increased in the past year. The most notable additions have been made in the Sections of Paleontology, Ornithology, Entomology, Ethnology, and Archæology. The gift by Mr. Carnegie to the Paleontolog-

ical Section of the great collection of Baron Ernest de Bayet, and the collections secured by the various expeditions sent to the West in this as in former years, have added very largely to the value and interest of the assemblage of specimens in this Section. The addition of the Anthony collection of birds to the collections already possessed by the Museum, as well as the accession of other lesser, but valuable collections of birds, has brought the Ornithological collections of the Museum to the point where, so far as the avifauna of North America is concerned, it begins to compare favorably with the best in the country, in number of specimens being outclassed by only three other collections. The purchase of a number of large and well determined ethnological collections representing the work of the Indians of the plains, and the very important work carried on by Mr. C. V. Hartman in Costa Rica, have added immensely to the amount and value of the collections in the Section of Ethnology and Archæology. In the other sections of investigation and research there have been notable additions, and upon the whole more valuable and interesting material has been acquired by the Museum during the past year than in any previous year of its existence. A general review of the work done in the various Sections is given in the following pages:

SECTION OF VERTEBRATE ZOOLOGY.

W. J. Holland, Director (in charge).
W. E. C. Todd, Custodian.
Frederick S. Webster, Chief Preparator.
J. L. Lockwood, Assistant Preparator.
Gustav A. Link, Assistant Preparator.
Louis H. Townsend, Assistant.

MAMMALS.

No very notable additions have been made to our collection of mammals during the twelve months that are just ending. From Mr. M. A. Carriker we received a small collection made in Costa Rica. Mr. W. W. Worthington secured a few specimens in Northwestern Florida. Several species indigenous to Allegheny County have been acquired by gift or purchase, and from the Zoölogical Gardens in Highland Park we have received a lemur, a male Chapman's zebra, a wallaby, and an antelope, which have been skinned and prepared for mounting. Mr. Webster and

Mr. Lockwood have between them prepared manikins and have mounted quite a number of the mammals which were already in our possession. The collection of mammals has not kept pace with the collection of birds, and more attention should be given to it in view of the fact that the collection of birds has already so far outstripped it. It does not aggregate more than a thousand specimens, representing only about three hundred species.

BIRDS.

The purchase of the collection of the birds of the Pacific coast made by Mr. A. W. Anthony has added ten thousand specimens to our cabinets. In addition to the Anthony birds, we have received during the past twelve months a large number of birds from Costa Rica, a considerable collection made through Mr. Worthington in Northwestern Florida, and a gift of one hundred and fifteen mounted birds presented by Mr. Charles Lockhart.

The entire collection of birds has been placed in storage trays in such a manner as to be accessible for purposes of study, and the specimens have been numbered. A considerable series of the birds of Pennsylvania and a few exotic birds have been mounted by Mr. Link, one of the assistants in the Taxidermic Laboratory. Mr. Todd has prepared a paper for publication in the *Annals*, based upon his observations made while collecting at Erie, Pennsylvania, from which locality we have received a large number of our specimens of shore-birds. This paper will appear in the latter part of Volume II of the *Annals*. The Director and Mr. Todd have together gone over, arranged, and classified the birds of Mombasa, East Africa, collected by the late William Doherty, and a list will shortly be published.

Some small additions have been made to the collection of eggs in our possession, the most notable being that of an egg of Æpyornis, secured by the Director by purchase from a gentleman who has recently returned from Madagascar. The egg is known to be one of the largest and finest in existence.

REPTILES AND BATRACHIANS.

A number of specimens representing the Reptilia and the Batrachia have been received by the Museum during the past year as gifts or have been acquired through the labors of the members

of the staff. No systematic effort, however, to increase the collections was made during the year. The Director of the Museum, assisted by Mr. Douglas Stewart, has labored to care for the rather extensive collection of specimens preserved in alcohol in our possession. Some of these collections, made in the American tropics, undoubtedly contain material worthy of critical study and investigation, and may possibly include some species new to science. It is proposed at once to assign them for study to an expert.

FISHES.

The ichthyological collections have been increased by the purchase from Professor C. H. Eigenmann of two sets of Fishes, one representing species from Paraguay, including co-types of several new species he has described; the other a set of fishes from Cuba. In addition to these specimens a few other smaller accessions have been made. The ichthyological collections of the Carnegie Museum are not as yet such as to put us in a position to boast of them, for while we have probably some five or six hundred species represented in our collection, and the material that we possess is excellent in quality, nevertheless the collection is so small as to make it appear by contrast with collections contained in other Museums as hardly worthy of more than passing notice.

SECTION OF INVERTEBRATE ZOOLOGY.

ARNOLD E. ORTMANN, Curator.
GEORGE H. CLAPP, Honorary Curator of Conchology.

Dr. Ortmann assumed his duties as Curator of this Section at the beginning of July, 1903. His first care was to ascertain what material belonged to the collections assigned to him. He accomplished this task by reference to the catalogue of accessions. He reports that it is now possible in a general way to give an account of what is represented in the collections and what is not. This is important, since an accurate knowledge of what we have and what we do not possess enables us to lay out plans for future additions and improvements. The Museum possesses a vast collection of Mollusca—Gastropoda and Pelecypoda—containing many types and co-types. The other groups of invertebrates are poorly

represented, with the exception of the Stony Corals and the Decapod Crustacea.

The principal work of the Curator after ascertaining the actual contents of the Museum in his section of labor was to go over the collections on exhibition, labeling those specimens which were not labeled and correcting the labels of those that had been incorrectly determined. This work having been completed, he has devoted himself largely to the cataloguing of the collection of Mollusca. The Hartman collection of shells has been unpacked, and the labor of cataloguing its contents has been begun. At present (March, 1904) the following groups of Mollusca have been catalogued: Marine bivalves, of the families Cardiidæ, Solenidæ, Tellinidæ, Veneridæ, Mactridæ, Astartidæ (chiefly those monographed by Dr. Dall in the Proceedings of the U. S. National Museum, 1900-1903). A smaller number of marine gastropods has been catalogued, and all of the land shells have been gone over and catalogued and re-identified. In this work much assistance has been given by Mr. George H. Clapp, Honorary Curator of Conchology. The alcoholic collections of invertebrates have been gone over and where there was danger of injury to specimens they have been put in new jars or the alcohol has been renewed, and in a few groups work has been begun in identifying and cataloguing.

With the consent of the Director the Curator has worked up two collections of Schizopod Crustaceans submitted to him. One collection from the Hawaiian Islands was entrusted to Dr. Ortmann by the Bureau of Fisheries, U. S. Department of Commerce and Labor. The other collection, sent in by the U. S. National Museum, was taken in Alaska. Reports on both collections will shortly be prepared. Duplicate material has been secured from both of them for the Museum.

The plans for future work in this Section are laid out chiefly with two points in view: First, a judicious addition to the collections in groups which are at present poorly represented; secondly, the continuation of the work of determination and of cataloguing with special reference to those groups hitherto neglected though represented in the collections. In the prosecution of this latter purpose a large number of additions to the library of the Museum are absolutely necessary. The work of the scientist can-

not be done without the aid of necessary books, and while the private libraries of the Director of the Museum and of Dr. Ortmann, the Curator, supplied some of the wants of the institution, the literature that is necessary for the successful prosecution of our work is yet lacking. It is no exaggeration to say that several thousands of dollars might with great profit be annually expended for a number of years for this Section alone.

SECTION OF ENTOMOLOGY.

W. J. HOLLAND, Curator.
HUGO KAHL, Custodian.
HENRY G. KLAGES, Assistant Preparator.

Over thirty accessions were made to the entomological collections of the Museum during the year, not including additions made to the Holland Collection on deposit in the Museum by the owner. Among the more noteworthy additions was the collection of exotic coleoptera purchased from Mr. Henry G. Klages, consisting of about twenty-five thousand specimens, representing about seven thousand species; collections of Costa Rican insects purchased from collectors in Costa Rica, or amassed by Mr. C. V. Hartman during his stay in that country; collections representing the lepidoptera of Formosa and various Indo-Malaysian islands, acquired by purchase from Mr. H. Fruhstorfer, of Berlin; a collection of lepidoptera from the valley of the Congo, purchased from Mr. C. B. Antisdel; a considerable collection representing the lepidopterous fauna of the United States, made by various members of the scientific staff of the Museum during their journeys, and by Mr. George H. Clapp during his stay in the summer months at Kennybunkport, in Maine. During the year over one hundred thousand insects have been mounted upon pins and partially classified. Almost all of the coleoptera belonging to the Herbert H. Smith collection have now been mounted, and it is hoped that it will be possible in the near future to distribute at least some portions of these collections to specialists for description. The orthoptera belonging to the Museum have been taken in hand by Professor Lawrence Bruner, of the University of Nebraska, and he will shortly report upon them. From Mr. Bruner we have received a small collection of the orthoptera of the United States accurately determined.

The great need of this department is cabinet room in which to properly arrange and classify the specimens, and room in which to work while the process of classification and study is going on. No section of the Museum possesses more valuable material, either by purchase or loan, and no other department is so thoroughly cramped. We have over a million specimens, representing probably two hundred thousand species. We have many thousands of types and co-types, but the whole vast assemblage, which is without exception the most valuable entomological collection on the continent, and has cost more money than any other in existence in America, is not available for the use of students, as it should be, simply because there is no room in which to display it, and no room in which the staff can properly work.

In the matter of literature we are better off than some other sections of the Museum, for the Director's private library, which is kept up at considerable annual expense, is freely accessible. In November, 1903, the Director succeeded, as the result of labor performed in odd moments, in publishing a volume on the moths of North America, being a companion to his work on the butterflies of North America. These two books are designed to popularize the knowledge of one small portion of the field of entomological research, and it is gratifying to know that they have been received with favor not merely by beginners, but by the more critical students of the subject.

Mr. William H. Ashmead's paper on the Chalcidoidea, published as the fourth Memoir of the Museum, has been followed by an equally important paper by him on the Proctotrypoidea and Cynipoidea of the collection made in South America by Mr. Herbert H. Smith. This paper will shortly issue from the press.

SECTION OF BOTANY.

W. J. HOLLAND, Director (in charge).
OTTO E. JENNINGS, Custodian.
MISS GRACE KINZER, Assistant.

Mr. J. A. Shafer, the Custodian of the Botanical Collections, in the spring of 1903 was authorized by the Director to accept the kind invitation which had been extended by Dr. N. L. Britton, of the New York Botanical Garden, to accompany him on a collecting excursion to Cuba. The expedition was successful. Exten-

sive collections were made in Cuba, where Mr. Shafer remained for some time after Dr. and Mrs. Britton had returned to the United States, and smaller collections were made in Southern Florida by the party while *en route* to and from Cuba. Collections were made in the vicinity of Pittsburgh by the Custodian and others associated with him during the summer of 1903. Mr. D. R. Sumstine, of Kittanning, Pennsylvania, continued during the summer and fall to collect the fungi of Western Pennsylvania, and has added a considerable number of specimens to the herbarium. Many smaller collections were donated during the year.

In addition to the collections made by the Custodian and different members of the Staff the Museum acquired by purchase for its herbarium a number of desirable collections. Among these may be mentioned twelve hundred sheets of plants of the Gulf Coast, purchased from Professor S. M. Tracy of Biloxi, Mississippi, sets of Mexican plants purchased from Mr. C. G. Pringle of Burlington, Vermont, and from Dr. Edward Farmer of the United States National Museum; a set of Cuban plants obtained from Mr. Charles L. Pollard of Washington, D. C.; a collection from Costa Rica, obtained from Professor Pittier of San Jose, and a collection from Southern California, purchased from Professor H. M. Hall of Berkeley, California.

In all forty-six accessions of larger and smaller collections have been added to the herbarium during the year. In this connection we desire gratefully to acknowledge the kindness of the authorities of the New York Botanical Garden, the Western Pennsylvania Botanical Society, and of a number of individuals interested in botany, whose gifts, as well as services, have tended to promote the success of botanical work in the Museum.

During the summer months Mr. Norman Miller was employed to assist in the herbarium. Mr. Miller worked with commendable industry, poisoning and preparing for mounting upon sheets all of the material in hand at that time which required to be thus treated.

During the year about nine thousand five hundred specimens have been mounted upon sheets and a majority of these have been distributed in the collection.

In November Mr. J. A. Shafer having accepted another position, Mr. Otto E. Jennings, a graduate of the Ohio State Uni-

versity, became his successor. Mr. Jennings has addressed himself with commendable zeal and energy to the work before him. The entire herbarium has been removed from the Museum building to No. 419 Craft avenue, where two large rooms have been fitted up with shelving in such a manner as to permit of the arrangement of the collection in systematic order. A third room is devoted to laboratory work, and a fourth has been assigned to the Custodian as his office and study. An embossed stamp has been provided, and hereafter all of the sheets bearing mounted specimens will be embossed in such a way as to prevent loss in the work of comparison and identification.

Instead of employing paper slips as heretofore in attaching specimens to the cards, we have decided upon using strips of gummed linen, which are less likely to break.

SECTION OF MINERALOGY.

W. J. HOLLAND, Director (in charge).
DOUGLAS STEWART, Custodian.

The collection of minerals belonging to the Museum is like the collection of fishes, excellent so far as it goes, but by no means complete. A fine collection of minerals cannot be amassed in a day, unless by the purchase of other collections, and as a rule such collections, which of necessity represent large expenditures of labor and money, can only be acquired by individuals and institutions possessing very large financial resources. There has not been any time in the history of our institution when we felt that we could do more than make minor purchases. In spite of this fact the collection has slowly grown. Much of that which we have secured is necessarily still in storage, because of lack of space in which to work up the collections or to display them. Mr. Stewart, the Custodian, with great fidelity has gone over the collections, cleaning specimens, to some extent relabeling them, and, looking forward to the time when the entire collection may be displayed, preparing in manuscript a series of labels which will enable us to put on exhibition a systematic collection, as well as smaller collections illustrating physical and economic truths, and setting forth and displaying the principles of crystallography.

The most notable additions during the past year have been a specimen of native tellurium, presented by Mr. Foster Hewett; a

specimen of pyrites weighing about three hundred pounds, presented by Mr. Frederick Anderson; a large block of pumice from Mt. Pelee, presented by the Armstrong Cork Company; a beautiful ball of quartz crystal, 95 mm. in diameter, absolutely perfect in form and flawless, purchased from a dealer; and a large crystal of pink calcite from the Joplin district, represented by the seller to be the largest of all the crystals of this kind discovered there recently, a statement which is believed to be correct.

SECTION OF PALEONTOLOGY.

J. B. HATCHER, Curator.
PERCY E. RAYMOND, Assistant Curator, in Charge of Invertebrates.
W. S. COGGESHALL, Chief Preparator.
EARL DOUGLASS, Assistant in Research, Field, and Laboratory.
SIDNEY PRENTICE, Draftsman.
O. A. PETERSON, Field Collector and Assistant in the Laboratory.
C. W. GILMORE, Field Collector and Assistant in the Laboratory.
LOUIS S. COGGESHALL, Assistant Preparator.
W. H. UTTERBACK, Field Collector and Assistant Preparator.
A. C. SILBERLING, Assistant Preparator.

Mr. Carnegie with great generosity has during the past year continued to maintain the work of this Section of the Museum, making for this purpose a special grant. In addition to this grant he authorized the purchase of the famous paleontological collection of Baron Ernest de Bayet of Brussels. More than a year ago the Curator of the Section of Paleontology called the attention of the Director to the fact that this collection might possibly be purchased. As the result of negotiations a price was fixed which seemed to justify the Director in requesting Mr. Carnegie to secure the collection for the Museum. This request was very graciously acceded to, and we have the satisfaction of knowing that the Museum possesses to-day by far the best representation of the fossil fauna and flora of Europe in the United States. In fact there is no collection of European fossils in the United States comparable either in extent or scientific value with this which has been so kindly given to the Museum by its founder.

The Bayet collection when packed and ready for shipment filled two hundred and fifty-nine cases. It was safely brought across the Atlantic, but owing to lack of room in the Institute it was stored in what was believed to be a fireproof building. It had

barely been safely lodged there when this building took fire. Fortunately the conflagration was confined by the skill of the Fire Department of Pittsburgh to the upper stories in which it originated, and did not reach our collection, which was on the lower floor. A vast amount of water filled the lower stories, but the manner in which the collection had been packed, everything having been wrapped in cotton batting or straw, prevented the access of any considerable amount of water to the specimens, and they passed through unscathed, sustaining no appreciable damage. At most a few specimens were by the dampness caused to fall apart, but as they originally existed in fragments the work of reuniting these fragments and restoring the specimens is only such as is common in the paleontological laboratory. The Bayet collection is especially rich in invertebrates from the Tertiary, Mesozoic, and Paleozoic formations of Europe; in fossil plants from the Eocene of Italy, and in fossil vertebrates from various European horizons. There are over a thousand specimens of fossil fishes, representing the fauna of the Solenhofen beds in Bavaria; the Jurassic deposits of Cerin, France, and the Tertiaries of Sicily and Monte Bolca. There is a splendid collection of Ichthyosaurs and other reptiles from the Lias of Würtemberg and Holzmaden, a superb collection of Pterodactyls and Rhamphorhynchi from Solenhofen and Holzmaden, crocodiles and turtles from the Italian Eocene of Monte Bolca, mosasaurs from the Cretaceous of Belgium, and a considerable number of good specimens of vertebrates from American localities, which had been purchased by the Baron, and which are restored again to the country from which they came.

Four field parties were engaged during the season of 1903 in making explorations into the Tertiary and Mesozoic formations of Montana, Wyoming, and Kansas. One of these parties, under the immediate direction of Mr. Hatcher, the Curator of the Section, was engaged in making collections from the Cretaceous of central Montana during the early part of the season. During the latter part of the season Mr. W. H. Utterback, who had been engaged in exhuming the remains of the skeleton of a large dinosaur which had been discovered in 1902 in the Jurassic of central Wyoming, was called to take charge of this work, and he continued to prosecute it until the arrival of frost made further work impossible.

Mr. C. W. Gilmore at the commencement of the season resumed his work in the Freeze Out Mountains of southern Wyoming which he had begun in 1902, and brought it to completion. The remainder of the season was spent by Mr. Gilmore in collecting in the cretaceous of western Kansas. In this work he was assisted by Mr. E. H. Sellards.

Mr. Earl Douglass continued his researches in the Tertiary lake-beds of western Montana throughout the summer.

All of these parties were eminently successful in making desirable additions to our paleontological collections, and a total of one hundred and thirty-five large cases containing fossils was shipped to the Museum as the result of their labors.

In the laboratory a great deal of work has been done. Under the immediate care of Mr. Coggeshall the preparators have extracted from the matrix and made ready for exhibition and study a considerable portion of the collection of dinosaurs. Mr. Coggeshall has also been engaged in modeling, under the direction of the Curator, such bones of *Diplodocus carnegii* as were defectively represented in the original specimen, in order that the same might be reproduced by the staff of workmen employed for the purpose of effecting a restoration of the skeleton of this colossal monster.

Owing to the accumulation of undeveloped material in the paleontological collections, it was decided that Mr. O. A. Peterson could be more advantageously employed in the summer in the laboratory than in the field as a collector. He was therefore given charge of the laboratory work on fossil mammals, a position which his experience and skill admirably fit him to fill. Assisted by Mr. A. W. Vankirk during the early part of the year and later by Mr. A. C. Silberling, Mr. Peterson has made very satisfactory progress, as is evidenced by the mounted skeletons of *Hoplophoneus, Oxydactylus,* and the group of Oreodonts (*Promerycochoerus*) now on exhibition. Mr. Hatcher, Messrs. Douglass, Peterson, and Gilmore, have contributed important articles to the publications of the Museum and to other journals during the year.

With the consent of the Director of this Museum and at the request of the Vertebrate Paleontologist of the United States Geological Survey, Mr. Hatcher undertook in October, 1902, the prep-

aration of one of the late Professor O. C. Marsh's uncompleted monographs. Mr. Hatcher reports that the manuscript and drawings for this volume are now well advanced and will be completed and in the hands of the printer by the close of the present fiscal year.

During the months of June and July, by permission of the Director of the Carnegie Museum, Mr. Hatcher engaged with Dr. T. W. Stanton of the United States Geological Survey in a reconnaissance of northern Montana and the adjacent portions of southern Canada, with a view to determining the age and stratigraphic position of the Judith River beds, Mr. Hatcher having taken exception to the unqualified statement made by the Vertebrate Paleontologist of the United States Geological Survey that the "true Judith River beds certainly overlie the Pierre and are of more recent age." The researches of Dr. Stanton and Mr. Hatcher demonstrated conclusively that the Judith River beds are overlaid by several hundred feet of Pierre shales and that the former sediments cannot be of more recent age than the latter.

During the winter months Mr. C. W. Gilmore was given temporary leave of absence to aid in the U. S. National Museum in the preparation of material for Mr. Hatcher's Monograph on the Ceratopsia.

The preparation of the cast of the skeleton of *Diplodocus carnegii* for the British Museum is now advancing toward completion and will, it is hoped, be ready for shipment by next August.

Much delay and loss of time is experienced in this Section of the Museum by lack of sufficient storage and laboratory space. The Section is also greatly inconvenienced through not having sufficient cases and trays in which to store the material as it comes from the preparators.

In spite of the drawbacks alluded to, which will in time be overcome, the work accomplished has been most successful and gratifying, and the Director takes occasion to express his thorough satisfaction with the able and intelligent manner in which the work in this Section has been carried on by the Curator and the members of the Staff associated with him.

SECTION OF COMPARATIVE ANATOMY AND OSTEOLOGY.

The general oversight of our osteological collections was placed by the Director a couple of years ago under the care of Mr. Hatcher, the Curator of Paleontology, but owing to the lack of funds, and more particularly owing to the lack of laboratory room in which to carry on the work, a great many of our osteological specimens have remained in the rough and have not been cleaned or articulated. Mr. Louis H. Townsend has, at such intervals as his employment as attendant upon Mr. Webster has permitted, labored at the work of cleaning skeletons, and Mr. Webster has himself devoted some time to the preparation of one or two specimens, but no skeletons have been mounted during the past twelve months. Mr. Webster has presented to us a skeleton of "Old Sorrel," General Stonewall Jackson's horse, the skin of which, mounted by Mr. Webster, is preserved at Richmond, Virginia. Mr. Webster is engaged in removing the grease from the bones and bleaching them, with a view to setting up the skeleton in the near future. The specimen possesses more historic than scientific interest. One of the things that must be done as soon as room can be secured is the work of providing for the preparation of a very considerable series of skeletons which we have, as well as adding to our collections other specimens which are really needed for those who are engaged in study in the section not only of recent, but of fossil vertebrates.

SECTION OF ETHNOLOGY AND ARCHAEOLOGY.

C. V. HARTMAN, Curator.
J. MUNSEN, Assistant.
THEODORE A. MILLS, Modeler and Sculptor.

The work in the Section of Archæology and Ethnology has been in the past year carried on jointly by the Director of the Museum and the Curator of the Section. In the division of labor the oversight of the ethnological work fell upon the Director of the Museum, while the prosecution of archæological research was being carried on by Mr. Hartman in Costa Rica.

The expedition to Costa Rica was carefully planned. Mr. Hartman left the Museum in the latter part of April and repaired

to San José, the capital. Here, acting under the instructions of the Director, he purchased the archæological collection owned by Padre José Maria Velasco, which, since the time of the Atlanta Cotton Exposition, has been on deposit in the Museum of Archæology of the University of Pennsylvania in Philadelphia. This collection consists of over two thousand specimens, principally amulets, weapons, matates, beads, and other objects of stone, made by the ancient Indians on the Pacific coast of Costa Rica. The collection includes the largest number of objects of the rare mineral, jadeite, in existence. The collection having been purchased, the Director of the Museum notified the Archæological Museum in Philadelphia of the fact, and subsequently notified them that it was his wish, for the time being at least, to allow the collection to remain in their custody, inasmuch as they had expressed a desire that this should be done. The collection was therefore on deposit in the Museum in West Philadelphia as a loan to the University of Pennsylvania by the Carnegie Museum until quite recently. Steps to secure its removal were taken a few weeks ago. Professor Hartman having successfully concluded his negotiations for the purchase of this collection, brought to a successful issue negotiations for a second collection nearly as large as the one in Philadelphia made by Padre Velasco in the same vicinity as that in which the first collection had been made. This collection, while containing a great many stone implements, is far richer in ancient pottery than the first collection, the two collections serving thus to mutually supplement each other, and aggregating between five and six thousand specimens illustrating the art of the ancient race, which before the advent of Europeans inhabited the Pacific coast of Central America.

Having purchased the collections in the possession of Padre Velasco and his associates, Mr. Hartman devoted himself to a thorough study of the archæological collections in the Instituto-Fisico-Geográfico at San José, access to which was most courteously accorded him through Professor H. Pittier, the Director, and the Minister of Public Instruction of Costa Rica. While carrying on this work Mr. Hartman made some collections of plants and insects as a few spare moments were left him.

His studies at the Museum in San José having been completed, Mr. Hartman began systematic excavations principally on

the slopes of Erazu, in the highlands of Costa Rica, where a burial ground containing a large number of stone cists was examined. Each grave was photographed both before and after the removal of the stone slabs. A valuable collection of objects of clay and stone, representing the culture of the ancient Guetares, was thus made. Investigation in other portions of the highlands were also carried on.

In order to obtain desirable data concerning the methods of burial at the ancient cemetery of Las Huacas, near Nicoya, where the great majority of the collections made by Padre Velasco had been exhumed, Mr. Hartman repaired to the Pacific coast and devoted a month to the work of excavation, securing thus some very important material.

Having returned to San José, Mr. Hartman made a brief excursion to the Atlantic coast of Costa Rica, and here, at an ancient Indian settlement, through the kindness of Messrs. M. C. and J. Keith, was permitted to secure for the Carnegie Museum some large stone idols. In the month of October Mr. Hartman succeeded in purchasing from the estate of Juan Troyo a collection of ancient pottery and stone objects made in the highlands of Costa Rica, consisting of about twenty-five hundred specimens. This collection had in part been on exhibition at the World's Fair in Chicago in 1893, and it is in many respects quite as important a collection as that of Padre Velasco. A number of other small purchases were made where objects of undoubted ancient manufacture, accompanied by necessary data, could be obtained from individuals. One of the most important of these collections thus acquired consists of four hundred pieces of ancient pottery purchased from Dr. Juan F. Ferraz.

All of the collections acquired by Mr. Hartman in Costa Rica, either by purchase or as the result of excavations, filling more than eighty large cases, have been brought to the Museum, and are at present stored at No. 419 Craft Avenue, where Mr. Hartman, assisted by Mr. J. Munsen, is engaged in unpacking, repairing, and cataloguing the collection. This is a work which will consume considerable time. The labor of restoring the broken fragments of earthenware vessels found in tombs is necessarily a work which must proceed with a certain amount of deliberation.

The ethnological collections have been enriched by the acqui-

sition of a large amount of material representing the manners and customs of the Indians of the plains in North America. Among the more important collections acquired is a quantity of material gathered among the Crow Indians on their Reservation, and pronounced by Dr. G. A. Dorsey, of Chicago, to be the best collection of its kind which has ever been made. We have also secured a collection of objects illustrating the life of the Osage Indians, among the objects contained in the latter collection being two "ceremonial bundles." At the present time only one other such bundle is known to exist in any of the Museums of the world, being the specimen belonging to the Field Columbian Museum in Chicago.

Mr. Theodore A. Mills has made a large number of models of Indians, intended to be employed in the construction of groups at a future time when sufficient room shall be provided to properly install them. These models have been temporarily stored at No. 419 Craft avenue.

SECTION OF NUMISMATICS.

MAGNUS PFLAUM, ESQ., Honorary Curator.

Mr. Magnus Pflaum, the Honorary Curator of Numismatics, has very kindly gone over the material in the possession of the Museum and has arranged a card catalogue in which are enumerated the coins of the various countries contained in our collection, except Asia. The considerable collections of Oriental coins which we possess from China, Japan, and other Asiatic countries, require for their determination the services of a specialist familiar with the languages of those countries. The larger portion of our collection has been derived from three sources, the private collections of Mr. Magnus Pflaum, Mr. S. H. Vandergrift, and Mr. Andrew Carnegie, donated to the Museum. In addition to the coins which we possess there is a very considerable collection of trade tokens, of medals and medallions, and of paper money. These collections have not yet been classified and arranged.

Mr. Pflaum's enthusiasm and kindness are greatly appreciated by the Director, and it is hoped that in the coming year it will be possible, now that a beginning in systematically arranging the collections has been made, to attempt work looking to the

filling up of lacunæ and the completing of series of the more important coinages of various countries.

SECTION OF CERAMICS.

W. J. HOLLAND, Director (in charge).

The collections of ancient American pottery in the possession of the Museum are notable. For the time being they are wholly under the custody (where they properly belong, from certain points of view) of the Curator of Ethnology and Archæology. During the past year some small additions have been made to our collection representing the fictile wares of more recent times. Some fine examples of Japanese ware and some good pieces of Old Colonial ware, as well as a number of pieces of modern ware having historic interest, have been added to our collection. In this connection the Director desires to especially acknowledge the kindness of the Ancient and Honorable Artillery Company of Boston in presenting to the Museum one of the plates commemorating the dinner given to the Honorable Artillery Company of London on October the 5th, 1903. This present was made through Col. Sidney M. Hedges, the Commander, upon the occasion of a recent visit to the Museum.

SECTION OF TEXTILES.

W. J. HOLLAND, Director (in charge).

This Section, provision for the establishment of which was made at the time that the plans for the Museum were formulated, remains in abeyance, neither place nor means being at present at our disposal to undertake a systematic development of this Section. Aside from some small collections representing fibers and the silk industry, nothing has as yet been done. It is the desire of the Director in the future, should the way be made clear, to install a representative collection showing the development of the textile industries, especially in America. We have secured some ancient looms of a primitive character, and some of the implements used in Colonial times. But this Section of the Museum remains to be developed.

SECTION OF GRAPHIC ARTS.

W. J. HOLLAND, Director (in charge).

A number of minor collections showing the development of the graphic arts are in our possession and have been for some considerable time. Here again lack of room, as well of sufficient resources, have prevented us from doing more than initiating the work. It is hoped that when the new building is completed the way may be clear to enter upon this interesting field and to prepare a series of exhibits which will show the development of the arts of printing, engraving, and photography. The collections which we possess we have been compelled to some extent to retire, there being neither case-room nor wall-space upon which to continue to exhibit them.

SECTION OF TRANSPORTATION.

W. J. HOLLAND, Director (in charge).
WILSON BANKS, Modeler.

This Section, in the development of which it is designed to show the origin and the progress of various methods of transportation, has made a notable beginning in the formation of a collection of models representing various methods of transportation, as well as the development of the locomotive engine, the railway car, and several forms of nautical craft. The field is extremely large and important, and it has been necessary for us, in view of various exigencies in other sections of the Museum, to call Mr. Banks, a very efficient modeler, from some of the work upon which he has been engaged in order to build cases and arrange for the storage of collections. During the past year models of a number of types of railway cars have been placed on exhibition.

HISTORICAL COLLECTIONS.

REV. A. A. LAMBING, D.D., Honorary Curator.

Every year since the first opening of the Museum has witnessed the addition to our collections of some things illustrating the early history of the region or bearing upon the larger history of the country. The year that has passed has proved no excep-

tion. A number of collections, some of books and documents, others of relics possessing historical value, have come into our hands, either as deposits or as gifts.

The work of publishing the old records of the Virginian Courts has been continued in the *Annals,* and has led to a very extensive correspondence, which has caused us to realize that the publication of these ancient documents has been an undertaking which met the desires of a multitude, especially of those who trace their lineage back to the first settlers of the upper valley of the Ohio.

THE LIBRARY OF THE MUSEUM.

During the past twelve months we have been able to add to the collection of reference books by purchase quite a large number of important volumes, and a number of works which are not only rare, but extremely useful in the special researches which different members of the staff are carrying on. The building up of a good library of scientific reference in the western part of the Commonwealth is a matter of the utmost importance. Not only is it impossible for scientific men to do their work properly without books, but a community of the size of Pittsburgh, the metropolis of so large a region, should not be without such a collection as it is the purpose of the Trustees of the Institute to assemble. Among the more important series of books which we have added to our library during the year may be mentioned a complete set of the publication of the Linnean and Zoological Societies of London, a complete set of the Reports of the Challenger Expedition, in fifty volumes, a large portion of the publications of the Wilkes Exploring Expedition, a set of the writings of Townend Glover, including his own copy of his entomological illustrations, annotated by his own hand, and a large number of important monographs and separate treatises relating to the various branches of science, researches in which are being carried on by the Staff of the Museum.

In exchange we have received for our publications a large number of the publications of kindred institutions and learned societies, so that a very fine nucleus of a library of scientific reference is being already formed. Many of the books, as was stated in my last Annual Report, have been placed under the special care

of the Curators and Custodians in the various Sections, after having been catalogued, so that they may have access to them as they need them.

PUBLICATIONS OF THE MUSEUM.

The second volume of the *Annals* of the Museum is nearing completion, Part IV of Volume II being in the hands of the printer. The first volume of the Memoirs has been completed and will shortly issue in bound form. Gratifying and appreciative reviews of our publications continue to be received from many sources. A list of the various papers published during the past twelve months by different members of the Staff, or by others who have based their writings upon the collections of the Museum is herewith appended:

Ashmead, William H.:

Classification of the Chalcid Flies, or the Superfamily Chalcidoidea, with Descriptions of the New Species in the Carnegie Museum Collected in South America by Herbert H. Smith. Memoirs of the Carnegie Museum, Vol. I., Part 4, pp. 225-551, with nine plates.

Crumrine, Boyd:

Introduction to Minutes of the Court of Yohogania County. Annals of the Carnegie Museum, Vol. II., pp. 71-77. 1903.

Introduction to Records of Virginia Court for Yohogania County, Held at Augusta Town (now Washington, Pa.), and Afterwards on the Andrew Heath farm, near West Elizabeth; 1776-1780. Annals of the Carnegie Museum, Vol. II., pp. 205-211.

Douglass, Earl:

Astropecten (?) Montanus. A New Star-fish from the Fort Benton; and Some Geological Notes. Annals of the Carnegie Museum, Vol. II., pp. 5-8. 1903.

New Vertebrates from the Montana Tertiary. Annals of the Carnegie Museum, Vol. II., pp. 145-200. 1903.

Hatcher, J. B.:

Reports of the Princeton University Expeditions to Patagonia, 1896-1899, Volume I. *Narrative of the Expeditions and Geography of Southern Patagonia,* pp. 1-16 and 1-314, with 51 photogravures, a map and text figures.

A New Sauropod Dinosaur from the Jurassic of Colorado, Proc. Biol. Soc. of Wash., Vol. XVI., pp. 1, 2.

Discovery of Remains of Astrodon (Pleurocœlus) in the Atlantosaurus Beds of Wyoming. Annals of the Carnegie Museum, Vol. II., pp. 9-14.

The Judith River Beds, Science, N. S., Volume XVII., pp. 471, 472.

L'Age des Formations Sedimentaires de Patagonie, Am. Jour. Sci. Volume XV. June, 1903, pp. 483-486.

A New Name for the Dinosaur Haplocanthus Hatcher, Proc. Biol. Soc., Wash., Volume XVI., p. 100.

Relative Age of the Lance Creek (Ceratops) Beds of Converse County, Wyoming, the Judith River Beds of Montana and the Belly River Beds of Canada, American Geologist, Volume XXXI., pp. 369-375.

The Stratigraphic Position of the Judith River Beds and Their Correlation with the Belly River Beds, J. B. Hatcher and T. W. Stanton. Science, N. S., Volume XVII., pp. 211, 212.

Osteology of Haplocanthasaurus, Memoirs of the Carnegie Museum, Volume II., Part 1, pp. 1-72, with 5 plates and 28 text figures.

Additional Remarks on Diplodocus, Memoirs of the Carnegie Museum, Volume II., pp. 72-75, with 1 plate and 2 figures in the text.

Vertebrate Paleontology at the Carnegie Museum, Science, N. S., Volume XVIII., pp. 569, 570.

Hay, O. P.:

Description of a New Genus and Species of Tortoise from the Jurassic of Colorado. Annals of the Carnegie Museum, Volume II., pp. 201-204.

Holland, W. J.:

Annual Report of the Director of the Carnegie Museum for the Year Ending March 31, 1903.

Report on the Prize Essay Contest of the Year 1903.

Review of "A Revision of the Lepidopterous Family Sphingidae," by Hon. Walter Rothschild and Karl Jordan, Ph.D. Science, N. S., Volume XVIII., pp. 15, 16. 1903.

Address Delivered Before the University of North Carolina on the Occasion of the Annual Commencement, June, 1903.

Address Delivered Before the Historical Society of Washington County, Pa. February 22, 1904. (Published by the Society.)

Address Delivered Before the National Board of Trade at the Annual Meeting Held in Washington, D. C., January, 1904. Published in the Report of the Proceedings, p. 97 et seq.

Convocation Week. Science, N. S., Volume XIX., pp. 433, 434.

Historical Sketch of Pittsburgh and Its Environs in "Pennsylvania, Colonial and Federal," Volume II., pp. 523-610.

The Moth Book, a Popular Guide to a Knowledge of the Moths of North America. Small 4to, pp. i.-xxiv., 1-479; 263 cuts in text, and 48 colored plates, with over 1,500 figures. New York: Doubleday, Page & Co. November, 1903.

Editorial Portions of the Annals and Memoirs of the Carnegie Museum. Articles on *"Lepidoptera"* and *"Pittsburgh"* in the Encyclopedia Americana.

Peterson, O. A.:

Osteology of Oxydactylus. Annals of the Carnegie Museum, Volume II., pp. 434-476.

Shufeldt, Dr. R. W.:

Osteology of the Limicolae. Annals of the Carnegie Museum, Volume II., pp. 15-70.

CIRCULATING COLLECTIONS.

Circulating collections have been prepared in addition to those reported in previous annual reports, and are in considerable demand by teachers in the various schools, not only of the cities of Pittsburgh and Allegheny, but the adjacent boroughs. These small collections carry the instruction which the Museum is intended to furnish to many at a distance, and they, having had their appetites whetted for further knowledge, make it a point to resort to the central institution. We thus establish relations of interest with the pupils in the public schools and private academies of Western Pennsylvania.

PRIZE ESSAY CONTEST.

A departure was made this year from the usage of former years in admitting to the privileges of the Prize Essay Contest the pupils of the public schools of the City of Allegheny, as well as those of Pittsburgh. The result was exceedingly pleasant, as had been anticipated. A generous rivalry was provoked, and the number of contestants rose to nine hundred and thirty-eight. The effect of the contest has been very good in stimulating interest in the work of the Museum, and indirectly in cultivating the taste for literary effort on the part of the young. To have led nearly a thousand of the boys and girls of the community to carefully study the collections of the Museum and then to commit to writing their observations is something which cannot fail to have its effect upon the general intelligence and culture of the entire community. Our desire and hope is that even greater interest may be developed in this contest in time to come.

THE ANDREW CARNEGIE NATURALISTS CLUB.

The Club has flourished during the past year, and has accomplished a great deal of good. Classes have been maintained, many lectures and addresses have been given by members of the

Staff of the Museum and others to the young people, who convene every other Saturday in the Lecture Hall. A number of those who began to study here in former years we now find in college and university engaged in work, which shows the effect of the stimulus they received when they were active members of the society. The zeal and interest developed by the lads is most highly commendable. In this connection the Director of the Museum desires to state that he has far more hope of the ultimate success in life of a boy who devotes himself to such pursuits than of the boy whose youth is passed in mere idleness. God bless the boys!

OUR DEBT TO THE RAILWAYS.

The Director of the Museum is called this year as in former years to acknowledge the indebtedness of the Museum to the railways for many kindnesses shown in furnishing transportation to the scientific men belonging to our Staff in going to and in coming from distant fields of labor, and in providing to some extent for free transportation for some of the collections which have been made. Among those whose generosity should be again remembered in this as in former years are Mr. Robert Pitcairn and Mr. James McCrea, of the Pennsylvania Railway System; Mr. J. F. Loree, of the Baltimore and Ohio; Mr. Marvin Hughitt, President of the Chicago and Northwestern Railway Company; Mr. E. K. Ripley, President of the Atchison, Topeka and Santa Fe Railway; Mr. Horace G. Burt and Mr. A. Darlow, of the Union Pacific Railway Company; Mr. A. J. Earling, of the Chicago, Milwaukee and St. Paul; Mr. James J. Hill, of the Great Northern Railway, and Mr. George B. Harris, President of the Chicago, Burlington and Quincy Railroad. All of these gentlemen with great kindness have endeavored to aid us in our efforts to promote scientific knowledge.

FINANCIAL STATEMENT

OF THE

CARNEGIE MUSEUM, PITTSBURGH, PENN'A.

April 1st, 1903—April 1st, 1904.

GENERAL FUND.

RECEIPTS.

1903.			
April 1.	To Balance on hand		$ 4,585.95
	" Annual Appropriation		49,000.00
1904.			
Mch. 31.	" Donated by Henry Phipps, Jr., for purchase of Journal of Bombay Society of Natural History		65.00
	" Sundry Amts. received from sale of material and refunds		132.13
	Total		$53,783.08

DISBURSEMENTS.

March 31, 1904:—		
By Salaries and Labor	$22,189.10	
" Repairs	31.83	
" Office Supplies, Stationery, etc.	250.89	
" Postage, Telegrams, etc.	353.41	
" Expressage, Freight, Drayage, etc.	1,126.08	
" Insurance	225.00	
" Moving Egyptian Boat-house	98.00	
" Incidentals	121.51	
" Traveling expenses and Car Fares	169.85	
" Laboratory Supplies	215.99	
" Packing and Unpacking	33.95	
" Telephone Rental	194.55	
" Alcohol, Drugs, etc	164.23	
" Prize Essay Contest	531.03	
" Publications	911.42	
" Printing Labels	76.52	
" Ammunition and Collecting Material.	6.15	
" Storage and Rent	1,094.82	
" Herbarium Supplies	284.30	
" Herbarium Boxes	121.25	
" Dues of Museum's Association	5.14	
" Exhibition Cases	1,059.00	
" Furniture	286.15	
" Trays, Boxes, and Storage Cases	2,235.31	
" Photographic Apparatus	9.50	
" Laboratory Fixtures	5.82	
" Tools	111.66	
" Insect Pins	135.11	
" Frames	11.99	
" Books Purchased	2,400.49	
" Books Binding	111.00	
" Collections Purchased	16,215.77	
		50,786.82
Balance on hand		$2,996.26

STATEMENT OF THE CONDITION OF THE SPECIAL FUND PROVIDED BY MR. ANDREW CARNEGIE FOR PALEONTOLOGICAL RESEARCH.

DR.

April 1, 1904:—

To Balance on hand April 1, 1903	$ 7,956.91
" Interest on daily balances	90.57
" Refunds	71.00
" Cash Contributed by Mr. Carnegie, Jan. 1, 1904	10,000.00
Total	$18,118.48

CR.

April 1, 1904:—

By Salaries Staff	$ 6,503.10
" Field Expenses, April 1-Nov. 1, 1903 (3 parties)	2,145.17
" Laboratory Supplies	236.56
" Purchase of Collections	450.00
" Traveling Expenses	90.00
" Freight	91.14
" Storage Cases and Trays	58.92
" Tools	4.20
" Incidentals	67.85
Total	$ 9,646.94
Balance on hand April 1, 1904, available to carry on work to Dec. 31, 1904	$ 8,471.54

PUBLICATION FUND.

DR.

April 1st, 1903:—		
To Balance on hand		$1,254.24
March 31st, 1904:—		
To Cash from Sale of Publications		73.90
" Interest on Daily Balances		10.29
" Cash received at sundry times from the General Fund to pay bills		911.42
Total		$2,249.85

CR.

March 31st, 1904:—		
By Sundry Payments as follows:		
" Paid Murdoch, Kerr & Co.:		
For Printing Prize Essay Report of 1902	$	135.50
" " Annual Report of 1903		177.45
" " Prize Essay Report of 1903		165.75
" " Rules and Regulations		15.25
" Paid New Era Printing Co.:		
For Printing Memoirs, Vol. I, Nos. 2 & 3		391.11
" " Annals, Vol. II, No. 1		217.98
" " Annals, Vol. II, No. 2		502.44
" " Memoirs, Vol. II, No. 1		270.43
" Paid Draughtsmen for Illustrating		60.50
" Paid Transcribing Records, etc		55.00
" Paid Engraving for Cuts		139.32
Total		$2,130.73
Balance in Union Trust Co		119.12
Total		$2,249.85

FUND RECEIVED FROM MR. ANDREW CARNEGIE FOR THE PURCHASE OF THE PALEONTOLOGICAL COLLECTION OF BARON E. DE BAYET.

DR.

1903.			
July	1.	To Cash received from Mr. Carnegie.....	$25,000.00
1904.			
Mch.	28.	" Interest on Daily Balances.....	50.90
		Total	$25,050.90

CR.

Mch.	28.	By Paid for Collection and Expense of Packing and Transporting same from Brussels to Pittsburgh.....	$23,366.36
"	"	" " Haugh & Keenan, Storage Charges.	118.80
"	"	" " S. K. Patterson, Hay to Repack part of Collection after Fire.....	7.50
"	"	" Transferred to Fund for Restoration of Diplodocus	1,558.24
		Total	$25,050.90

The foregoing account has been examined by us and found to be correct.

JOHN D. SHAFER,
S. H. CHURCH,
Committee of Audit.

REPORT OF THE OFFICER IN CHARGE OF THE CATALOGUE OF ACCESSIONS.

April 1, 1904.

DR. W. J. HOLLAND, Director,

DEAR SIR:

Herewith please find a list of the accessions to the Carnegie Museum during the past year. The total number of accessions to the scientific collections contained in the Museum was 254, containing, at a rough estimate, over two hundred thousand objects. The accessions to the library were 269, consisting of 499 bound volumes and 1,016 pamphlets and unbound numbers of serial publications. The total number of loans made during the year and accessed by us was 6.

Trusting that the list may be found correct and meet with your entire approval, I am,

Yours respectfully,

DOUGLAS STEWART,
Accession Officer.

PERMANENT ACCESSIONS TO THE CARNEGIE MUSEUM.

April 1, 1903, to April 1, 1904.

DONATIONS.

Ames, C. H., care D. C. Heath & Co., Boston, Mass. Collection of Lepidoptera from Penang, Straits Settlements. May 28, 1903.. ..(2274)

Ancient and Honorable Artillery Company, Boston, Mass., by Col. Sidney M. Hedges, 45 Milk St., Boston, Mass. Souvenir plate commemorating banquet given the Honourable Artillery Company, Oct. 5, 1903. March 2, 1904.. .. .. .

Berry, Edward W., Passaic, N. J. Eight cones of *Sequoia gracilliina* (Lesq.), Newberry. Sept. 21, 1903.. .. ..(2360)

Booth, James J., Boquet St., Pittsburgh, Pa. Herbarium specimens of Eucalyptus from California (two species). May 29, 1903.. ..(2278)

Bowman, Mrs. R. D., Duquesne, Pa. (1) Powder-horn; (2) Stone axes; (3) Bull-dog pistol; (4) Bullet mould. Nov. 23, 1903.. .. ..(2399)

Brindle, E. R., Latrobe, Pa. One piece petrified wood from Latrobe. Dec. 17, 1903.. .. ..(2409)

Britton, N. L., E. G. Britton, J. A. Shafer, Botanical Garden, Bronx Park, N. Y. Plants collected near Tampa, Fla. May 26, 1903.. .. ..(2267)

Plants collected in Matanzas and Havana provinces, Cuba. May 26, 1903.. .. ..(2268)

Britton, Dr. N. L., Botanical Garden, Bronx, N. Y. Plants collected near Miami, Fla. May 26, 1903.. .. ..(2270)

Bush, Mrs. Emma, 848 Third St., Allegheny, Pa. Wild-cat, owl, red-tailed hawk, all mounted. April 30, 1903.. .. ..(2246)

Canby, Wm., Wilmington, Del. Specimens of two species of oak from Wilmington, Del. Aug. 11, 1903.. .. ..(2334)

Herbarium specimens. Aug. 17, 1903.. .. ..(2335)

Carnegie, Andrew, Fifth Ave., N. Y. Bayet Paleontological collection from Brussels, Belgium (259 cases). Sept. 11, 1903.. .. .. ..(2348)

Tertiary fossils (17 boxes), collected by Earl Douglass. Nov. 18, 1903. .. ..(2396)

Vertebrate fossils (7 boxes), collected by C. W. Gilmore. June 26, 1903.. .. ..(2312)

Cretaceous fossils (57 boxes), collected by C. W. Gilmore. Nov. 6, 1903.. .. ..(2388)

Cretaceous fossils (32 boxes), collected by J. B. Hatcher, Earl Douglass, and W. H. Utterback. Nov. 18, 1903.. .. ..(2394)

Reptilian remains from the Judith River beds of Montana, collected by J. B. Hatcher. Sept. 7, 1903.. .. ..(2345)

Cretaceous and Jurassic fossils (3 boxes), collected by A. C. Silberling. Jan. 5, 1904.. .. ..(2417)

Jurassic fossils (29 boxes), collected by W. H. Utterback. Nov. 18, 1903.. .. ..(2395)

One block containing colony of Pentamerus oblongus. Feb. 20, 1904. Purchased from C. J. Sarle, Yale Museum, New Haven, Conn..(2435)

Cretaceous fossils (6 boxes). Purchased from Charles H. Sternberg, Lawrence, Kans. March 29, 1904.. .. ..(2484)

Cast of brain cavity of Neanderthal skull. Purchased from Charles A. Ward, Rochester, N. Y. May 4, 1903.. .. ..(2249)

Carr, Charles B., 1305 Veto St., Allegheny, Pa. Ulster County Gazette, published at Kingston, Saturday, Jan. 4, 1800, and containing account of Washington's funeral. (Reprint.) February 25, 1904.. ..(2457)

Clapp, Mrs. D. C., Pittsburgh. Plants from French Lick, Ind. (11 species, 15 herbarium specimens). June 1, 1903.. .. ..(2280)

Fungus on grass from French Lick, Ind. Dec. 1, 1903.. .. ..(2403)

Commissioners of Allegheny County, Pittsburgh. Painting of old court house and market in Pittsburgh. Feb. 23, 1904.. .. ..(2449)

Consolidated Granite Co., Ortonville, Minn. Minnesota granite, polished (1 specimen). May 25, 1903.. .. ..(2264)

Davis, Dr. T. D., Shady Ave., Pittsburgh. Plants from Arkansas. (Through Botanical Society of Western Pennsylvania.) Sept. 4, 1903. .. ..(2343)

Devenney, James L., Yester Building, McKeesport, Pa. Indian god (wooden) secured from Chief Numikamus, Siwash Indians, Barclay Sound, Alaska, Sept., 1903.. .. ..(2367)

Egypt Exploration Fund, Pittsburgh Branch, care Rev. W. R. Farmer, Edgewood Park, Pa. Egyptian antiquities (2 cases). Nov. 3, 1903. .. ..(2400)

Eifrig, Rev. G., Cumberland, Md. Herbarium specimens from Maryland and Southern Pennsylvania. Oct. 1, 1903.. .. ..(2373)

Frenzel, A. B., Denver, Col. Ferro Vanadium made in France (2 specimens). March 23, 1904.. .. ..(2481)

Friel, Dennis, Robert and Andrew Settlemoyer, Pittsburgh. *Cambarus dubius*, adult male, collected in Schenley Park, Pittsburgh. Oct. 5, 1903.. .. ..(2375)

Frost, Albert, Pittsburgh. *Erythronium albidum* from Homewood Hollow, Pittsburgh. June 19, 1903.. .. ..(2310)

Grossman, Hans. Three birds and six sets of birds' eggs from Okak, Labrador. March 30, 1904.. .. ..(2487)

Hardh, Hugo, Brahestad, Finland. Pair of birchbark shoes made in Finland and used by peasantry in traveling over swampy ground. Child's birchbark knapsack. May 19, 1903.. .. ..(2258)

Hatry, Otto, Pittsburgh. Herbarium specimens of many local species of plants. May 23, 1903.. .. ..(2261)

Heasley, Dr., 543 Smithfield St., Pittsburgh. Set of ten unused World's Fair tickets. December 17,.1903.. .. ..(2410)

Hewett, Foster, 325 Water St., Pittsburgh. Native Tellurium, Vulcan Mine near Iola, Col. Sept. 16, 1903.. .. ..(2357)

One specimen Cerrusite from Mammoth Standard Mine near Burke, Idaho. Oct. 1, 1903.. .. ..(2371)

Highland Park Zoological Garden, Pittsburgh. Wallaby *(Macropus wallabatus)*, male. Sept. 23, 1903.. .. ..(2365)

Zebra, male. Nov. 23, 1903.. .. ..(2402)

Lemur, male. Jan. 22, 1904.. .. ..(2428)

Holmes, Katherine R., 552 East St., Allegheny, Pa. Plants from Westmoreland County. (Donated through Botanical Society, Western Pennsylvania.) Sept. 4, 1903.. .. ..(2344)

Horne, Durbin, Joseph Horne Co., Pittsburgh. Twenty Filipino hats. Oct. 22, 1903.. .. ..(2383)

Jacobs, J. Warren, Waynesburg, Pa. Two Purple Martins, male and female, Waynesburg. June 18, 1903.. .. ..(2308)

Keefer, Iantha D., 721 South Ave., Wilkinsburg, Pa. Plants from Somer-

set County, Pa. (Donated through Botanical Society, Western Pennsylvania.) Sept. 4, 1903.. .. ..(2342)
Kellerman, Prof. W. A., Ohio State University, Columbus, O. Ohio Fungi, Fascicle VII. (20 herbarium specimens). July 8, 1903.. .. ..(2317)
King, Henry H., Port Huron, Canada. Worm, family *Gordiidæ*. Oct. 2, 1903.. .. ..(2374)
Laughlin, Irwin, U. S. Legation, Tokyo, Japan. Bronze short-sword, dredged from River Marne, France. Dec. 21, 1903.. .. ..(2411)
Lazzoni, Count Renato (through U. V. Fontana), Carrara, Italy. Carrara marble (22 specimens, containing quartz crystals). March 22, 1904.. .. ..(2479)
Lewis, J. L., N. Craig St., Pittsburgh. Topaz from Mt. Blanc (2 specimens). March 22, 1904.. .. ..(2426)
Lester, Frederic A., 137 Corcoran Building, Washington, D. C. Piece of silicified wood. April 20, 1903.. .. ..(2239)
Geological specimens. July 20, 1903.. .. ..(2322)
Twelve pieces of silicified wood, one piece showing work of a borer, other side polished. Sept. 8, 1903.. .. ..(2353)
Large piece of silicified wood from Washington, D. C. Sept. 11, 1903. .. ..(2354)
Seventy-two concretions; two pieces conglomerate cemented with iron; twelve iron forms; a number of red balls (iron oxides); fragments of iron oxides. From Brookland and Eckington, D. C. (Through F. S. Webster, Carnegie Museum.) Sept. 8, 1903.. .. ..(2355)
Concretions from District of Columbia (28 specimens). Oct. 4, 1903. .. ..(2379)
Concretions from District of Columbia (47 specimens). March 2, 1904.. .. ..(2463)
Lockhart, Charles, Pittsburgh. Collection of mounted birds from Scotland (40 specimens). May 14, 1903.. .. ..(2254)
Collection of birds' eggs from Scotland (76 specimens). May 14, 1903.. .. ..(2255)
Magee, Mrs. T. J., Lowrie and Branch Sts., Allegheny, Pa. The Boston Gazette and Country Journal of Monday, March 12, 1770; $2 Continental note, Philadelphia, 1776; $20 Confederate note, Richmond, 1864. March 9, 1904.. .. ..(2473)
Mason, Harrison D., 1107 Ridge Ave., Allegheny, Pa. Collection of flint implements gathered along the Allegheny and Ohio rivers. April 27, 1903.. .. ..(2243)
McClintock, H. P., 123 N. Linden Ave., Pittsburgh. Red-legged partridge, *(Cacabis rubra)*. April 21, 1903.. .. ..(2238)
Medsger, O. P., Jacobs Creek, Pa. Plants, Westmoreland County. June 3, 1903.. .. ..(2283)
Fungus from locust tree, Jacobs Creek, Pa. Aug. 28, 1903.. ..(2339)
Fruit of *Hicoria microcarpa* from Westmoreland County, Pa..(2384)
Saw-whet owl *(Cryptoglaux acadica)*, female. Jan. 23, 1904..(2427)
Mellor, Walter C., Edgewood Park, Pa. Portrait in oil of Mr. C. C. Mel-

lor, Chairman of Museum Committee, painted by M. B. Leisser. March 8, 1903. . . . . (2472)

Miersch, C. H., 1402 Western Ave., Allegheny, Pa. Crutches given Mr. Miersch at Fortress Monroe in 1862, after battle of Gaines Mill. June 26, 1903. . . . . (2311)

Milnor, Mrs. C. G., West Palm Beach, Florida. Melodeon made by Geo. A. Prince & Co., Buffalo, in 1847. March 23, 1904. . . . . (2480)

Moore, Dr. H. D., New Lexington, Pa. Specimen of curly red maple *(Acer rubrum)*. March 22, 1904. . . . . (2478)

Murdoch, Kerr & Co., Cherry Alley, Pittsburgh. Dragon fly *(Anax junius)*. May 28, 1903. . . . . (2276)

New York Botanical Garden, Bronx Park, New York. Herbarium specimens, about 300 sheets. Aug. 11, 1903. . . . . (2333)

Seed of Coco de Mer, *(Lodoicea sechellarum)*. May 25, 1903. . (2271)

Osborn, Prof. H. F., American Museum Natural History, Central Park, New York. Restoration of Protorohippus by Chas. R. Knight. March 24, 1904. . . . . (2482)

Patterson, Robert J., Yorkville, Ohio. Lower jaw, 2 humeri, 1 radius and ulna, 1 femur, atlas of *Equs caballus,* found on Pike Island, Ohio River. May 8, 1903. . . . . (2252)

Pim, W. Paul, Carbon Black, Pa. American coot *(Fulica americana)*, male. March 30, 1904. . . . . (2486)

Pittsburgh Post, Pittsburgh, Pa. Bones of deer, etc., found fifteen feet below surface in excavating for Post Building, 612 Wood St. April 22, 1903. . . . . (2241)

Rudolph, Mr., Pittsburgh. Arachnida (family *Lycosidæ)* from Arizona. June 12, 1903. . . . . (2305)

Schweizerisches Landesmuseum, Zurich, Switzerland. Engraving of old Swiss Interior. May 2, 1903. . . . . (2248)

Settlemoyer, Robert and Andrew and Dennis Friel, Pittsburgh. *Cambarus dubius,* adult male, collected in Schenley Park. Oct. 5, 1903. . (2375)

Shaw, George R., Arnold Arboretum, Jamaica Plains, Mass. Herbarium specimens and cones of 53 species of *Pinus* from various countries. July 9, 1903. . . . . (2318)

Sherwood, Mr. E. L., Shadyside Academy, Pittsburgh. One calcite geode from Illinois. March 26, 1904. . . . . (2483)

Smith, Mrs. Annie Morrill, 78 Orange St., Brooklyn, N. Y. Mosses, mostly from Pennsylvania, 112 herbarium specimens. May 29, 1903. . . (2279)

Stein, Charles F., Butler, Pa. One revolver found at Camarine, Southern Luzon, P. I.; spear head (iron) from Mindanao, P. I.; three nuts from Philippine Islands; 2 cartridges. Sept. 21, 1903. . . . . (2363)

Stengel, Dr. Alfred, 1811 Spruce St., Philadelphia, Pa. Herbarium specimens of plants collected in Pennsylvania in 1885. Oct. 1, 1903. . (2372)

Stewart, Mrs. D. A., 949 Lincoln Ave., Allegheny, Pa. Canada thistle from Conneaut Lake, Pa. Nov. 1, 1903. . . . . (2390)

Sumstine, Prof. D. R., Kittanning, Pa. Fungi from Armstrong Co., Pa. June, 1903. . . . . (2289)

Part of tree found in Bolivar coal mine, Lockport, Pa. July 20, 1903.. .. .. .

lor, Chairman of Museum Committee, painted by M. B. Leisser. March 8, 1903.....(2472)

Miersch, C. H., 1402 Western Ave., Allegheny, Pa. Crutches given Mr. Miersch at Fortress Monroe in 1862, after battle of Gaines Mill. June 26, 1903.....(2311)

Milnor, Mrs. C. G., West Palm Beach, Florida. Melodeon made by Geo. A. Prince & Co., Buffalo, in 1847. March 23, 1904.....(2480)

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Part of tree found in Bolivar coal mine, Lockport, Pa. July 20, 1903.. .. .. .

Collection of rare shells from North America, Jamaica, and Bahamas, and Phyllopod Crustacean *(Estheria)* from New Mexico. Jan. 14, 1904.. .. .. .

Mills, T. A., Carnegie Museum, Pittsburgh. Models made in Museum Laboratory:

(1) Two figures of Moki squaws. March 8, 1904.. .. ..(2466)
(2) Two life-size figures of Navajo Indians. March 8, 1904..(2467)
(3) Life-size figure of Navajo squaw. March 8, 1904.. .. .. ..(2468)
(4) Life-size figure of Sioux squaw. March 8, 1904.. .. ..(2469)
(5) Life-size figure of Mexican Indian squaw. March 8, 1904..(2470)
(6) Life-size figure of Apache Indian (Geronimo). March 8, 1904.. .. ..(2471)
(7) Twelve life-size figures for group "Penn's Treaty with the Indians." March 8, 1904.. .. ..(2465)

Ortmann, Dr. A. E., Carnegie Museum, Pittsburgh. Reptiles and amphibians from Princeton, N. Y. Aug. 3, 1903.. .. ..(2330)
Invertebrates, chiefly crustacea and shells from various sources. Aug. 3, 1903.. .. ..(2331)
Insects, chiefly Lepidoptera, collected in New Jersey. Aug. 3, 1903.. .. ..(2332)
Cambarus dubius Fox (8 specimens); *Cambarus bartoni* (3 specimens) from Edgewood, Pa. Oct. 12, 1903.. .. ..(2378)
Cambarus diogenes (1 male, 1 female, 4 juveniles). Oct. 19, 1903.. .. ..(2381)
Garter snake from Fern Hollow, Pittsburgh. Oct. 19, 1903.. ..(2382)
Crayfish *(Cambarus diogenes)* and a number of amphipods, and freshwater gastropods, collected in Fern Hollow, Pittsburgh. Nov. 16, 1903.. .. ..(2391)

Peterson, O. A., Carnegie Museum, Pittsburgh. Collection of lepidoptera (108 specimens) from Sioux Co., Neb. Feb. 24, 1904.. .. ..(2453)

Pflaum, Magnus, Bakewell Building, Pittsburgh. Manganese ore from Campbell Co., Va. July 24, 1903.. .. ..(2327)

Prentice, Sidney, Carnegie Museum, Pittsburgh: *Cambarus diogenes,* male; *Cambarus immunis,* male and female, Lawrence, Kans. Sept. 21, 1903.. .. ..(2362)

Shafer, J. A., Carnegie Museum, Pittsburgh. Minerals (7 specimens) from Mandruga, Cuba. May 25, 1903.. .. ..(2265)
Plants collected in Havana and Pinar del Rio Provinces, Cuba. May 26, 1903.. .. ..(2269)
Plants collected in or near the New York Botanical Garden, Bronx Park, N. Y. May 26, 1903.. .. ..(2272)
Three fossil shells from Mandruga, Cuba. June 3, 1903.. .. .. ..(2285)
Sponge from "Playa," Havana, Cuba. June 3, 1903.. .. ..(2286)
Comb and fragment of machete from cavern of Madruga Hills, Cuba, supposed to have been property of insurgents. June 3, 1903.. ..(2287)
Collection of lepidoptera, coleoptera and scorpions from Matanzas and Madruga, Cuba. March 15, 1904.. .. ..(2476)
Fungi. June 10, 1903.. .. ..(2295)
Two Myriopoda from Coarl Hills near Madruga, Cuba. Sept. 1, 1903. .. ..(2341)

Red bat, male. Aug. 24, 1903.. .. ..(2352)
Map of Allegheny Co., Pa. Nov. 1, 1903.. .. ..(2389)
Shafer, J. A., and Wm. Canby, Carnegie Museum, Pittsburgh. Two species of oak collected at Wilmington, Del. Aug. 11, 1903.. .. .. ..(2334)
Shafer, J. A., N. L. Britton, E. G. Britton, Carnegie Museum, Pittsburgh. Plants collected near Tampa, Fla. May 25, 1903.. .. ..(2267)
Plants collected in Matanzas and Havana Provinces, Cuba. May 26, 1903.. .. ..(2268)
Shafer J. A., and O. P. Medsger, Carnegie Museum, Pittsburgh. Plants collected in Westmoreland Co., Pa. June 3, 1903.. .. ..(2283)
Silberling, A. C., Carnegie Museum, Pittsburgh. (See Andrew Carnegie.)
Stewart, Douglas, 950 Ridge Ave., Allegheny, Pa. Set of modern Egyptian coins (8 specimens); one French coin. March 2, 1904.. .. ..(2460)
Todd, W. E. C., Carnegie Museum, Pittsburgh. Birds from Walton Co., Fla. (56 specimens, 30 species). June 11, 1903.. .. ..(2294)
Six birds from Beaver Co., Pa. (5 species of warblers). Dec. 30, 1903. .. ..(2414)
Mammals (46 specimens, 10 species) from Walton Co., Fla. Collected by W. E. C. Todd and W. W. Worthington. June 11, 1903.. ..(2296)
Four sets of birds' eggs, with nest, from Walton Co., Fla. Collected by W. E. C. Todd and W. W. Worthington. June 11, 1903.. ..(2297)
Utterbeck, W. H., Carnegie Museum. (See Andrew Carnegie.) Four buffalo skulls collected at Willow Creek, near Musselshell River, Mont. Feb. 25, 1904.. .. ..(2458)
Worthington, W. W., Whitfield, Fla. Fifty-five shells (probably 2 species) from Walton Co., Fla. June 11, 1903.. .. ..(2293)
Mammals (46 specimens, 10 species) from Walton Co., Fla. Collected by W. W. Worthington and W. E. C. Todd. June 11, 1903.. ..(2296)
Four sets of birds' eggs, with nest, from Walton Co., Fla. Collected by W. W. Worthington and W. E. C. Todd. June 11, 1903..(2297)
Webster, Frederic S., Carnegie Museum, Pittsburgh. Skeleton of Stonewall Jackson's war-horse, "Old Sorrell." Sept. 2, 1903.. .. ..(2369)
Osceola doliata triangula boie, Allegheny Co., Pa. Nov. 4, 1903.(2387)

PURCHASED BY TRUSTEES.*

Antisdel, C. B., 1143 Hamlin Ave., Chicago, Ill. Collection of insects from the Congo. July 2, 1903.. .. ..(2315)
Bachhuber, Dr. L. M., Mayville, Wis. Two passenger pigeons. Feb. 24, 1904.. .. ..(2454)
Bachtell, W. L., Webb City, Mo. Crystal of red calcite from Webb City, Mo. Jan. 26, 1904.. .. ..(2429)
Crystal of purple calcite from Joplin, Mo. March 18, 1904.. ..(2477)
Bacon, Samuel E., Second National Bank, Erie, Pa. Two Upland Plovers from Erie, Pa. May 4, 1903.. .. ..(2251)
Two Bartramian Sandpipers (*Bartramia longicauda*, male and female,

*The names of the persons from whom purchased are given in alphabetical order.

from Erie, Pa. May 14, 1903.. .. .. .

Heeren Bros. & Co., Penn Ave., Pittsburgh. Collection of ancient and modern silver coins (111). July 6, 1903.. .. ..(2316)

Heilig, R. W., 3318 N. 26th St., Tacoma, Wash. Collection of Alaskan lepidoptera. Feb. 23, 1904.. .. ..(2442)

Hemphill, Henry, San Diego, Cal. Collection of shells from the islands of California. April 20, 1903.. .. ..(2236)

Hirase, Y., Kyoto, Japan. Collection of land shells. May 2, 1903..(2247)

Hudson, George V., Wellington, New Zealand. Collection of lepidoptera of New Zealand (264 species). Sept. 14, 1903.. .. ..(2350)

Hyde Exploring Expedition, 26 W. 23d St., New York City. Feather basket made by Pomo Indians. Dec. 11, 1903.. .. ..(2408)

Kellerman, W. A., Ohio State University, Columbus, O. Ohio fungi, Fascicle VIII. Nov. 17, 1903.. .. ..(2393)

Klages, Henry, Jeannette, Pa. Collection of exotic coleoptera (about 25,000 specimens). May 28, 1903.. .. ..(2275)

Laub, Herman, 3436 Boquet St., Pittsburgh. Indian stone implement found under foundation of new bridge at Aspinwall, Pa. Sept. 21, 1903.. .. ..(2364)

Leverett, W. J., 34 Stuyvesant St., Binghampton, N. Y. Lepidoptera (124 specimens) from Hainan, China. Sept. 18, 1903.. .. ..(2359)

McClendon, J. F., University of Texas, Austin, Tex. Collection of insects from Mexico. Feb. 23, 1904.. .. ..(2441)

Moore, Wm., Pravo, Jefferson Co., O. *Putorius alegheniensis*, male. Jan. 27, 1904.. .. ..(2431)

Palmer, Dr. Edward, U. S. National Museum, Washington, D. C. Mexican plants (192 specimens). June 18, 1903.. .. ..(2307)

Perkins, Capt. Frederic, Ft. Egbert, Alaska. Collection of Alaskan lepidoptera. Feb. 23, 1904.. .. ..(2443)

Pollard, Charles L., 1854 Fifth St., N. W., Washington, D. C. Cuban plants (264 herbarium specimens). May 26, 1903.. .. ..(2266)

Preston, H. B., 3 Sydney Terrace, Fulham Road, London, S. W., England. Collection of deep-sea shells from the "Porcupine," "Valorous" and other expeditions. March 3, 1904.. .. ..(2464)

Pringle, C. G., University of Vermont, Burlington, Vt. Mexican plants, 724 specimens. July 20, 1903.. .. ..(2323)

Cuban plants (50 specimens). Aug. 1, 1903.. .. ..(2329)

Proctor, James, Twickenham Park, St. Margarets, England. Æpyornis egg found off S. W. coast of Madagascar floating on the sea. Sept. 14, 1903.. .. ..(2349)

Reinhardt, H. J., 20 Paxico Ave., Pittsburgh. Old musical instrument, composed of a series of glasses and played by rubbing with wet fingers. Sept. 28, 1903.. .. ..(2368)

Retzer, J. Henry, West Bridgewater, Pa. Red-head duck *(Aythya americana)*, male, West Bridgewater, Pa. March 30, 1904.. .. ..(2485)

Riotte, Walter C., San Jose, Costa Rica. Collection of Costa Rican lepidoptera. May 27, 1903.. .. ..(2273)

Springer, J. L., Carnot, Pa. Red fox, male. Nov. 14, 1903.. .. .. ..(2392)

Stecker, Rev. Adolf, Bethel, Kuskowim River, Alaska. Collection of lepidoptera from Alaska. Feb. 23, 1904.. .. ..(2444)
Sumstine, Prof. D. R., Kittanning, Pa. Pennsylvania fungi. Oct. 26, 1903.. .. ..(2385)
Tracy, Prof. S. M., Biloxi, Miss. Herbarium specimens of Gulf Coast plants (1,200 sheets). May 25, 1903.. .. ..(2263)
Troyo, Estate of Juan, San José, Costa Rica. Troyo collection of Costa Rican antiquities. Feb. 23, 1904.. .. ..(2439)
Underwood, C. F., San José, Costa Rica. Entomological collection, coleoptera, etc., from Costa Rica. Feb. 23, 1904.. .. ..(2448)
Velasco, José Maria, San José, Costa Rica. Velasco collection of Costa Rican antiquities. Feb. 23, 1904.. .. ..(2437)
Velasco collection of Costa Rican antiquities. Feb. 23, 1904..(2438)
Worthen, C. K., Warsaw, Ill. Three wild pigeons (2 males, 1 female). Sept. 29, 1903.. .. ..(2370)
Passenger pigeon. Feb. 24, 1904.. .. ..(2455)
Worthington, W. W., Shelter Island Heights, N. Y. Collection of lepidoptera and other insects from Portland, Fla. May 28, 1903.. .. .. ..(2277)
Birds (901 specimens) from Walton Co., Fla. (90 species). June 11, 1903.. .. ..(2298)
Young, Rev. S. H. and Rev. M. E. Koonce, Rampart, Alaska. Collection of Alaskan lepidoptera. Feb. 23, 1904.. .. ..(2445)

EXCHANGES.

Arnold Arboretum of Harvard University, Jamaica Plains, Mass. Herbarium specimens (12 species *Cratægus*, 1 *Pinus*), May 23, 1903. (2259)
Instituto Physico-Geographico, San José, Costa Rica. Herbarium specimens from Costa Rica. Oct. 27, 1903.. .. ..(2386)
Kellerman, Prof. W. A., Ohio State University, Columbus, O. Ohio fungi, Fascicle VI., containing 20 herbarium specimens. May 23, 1903. (2260)
Paleontological Institute of Vienna University, Vienna, Austria. Collection of casts of the remains of dinosaurs from the Gosan beds. Sept. 8, 1903.. .. ..(2346)
Pfordte, Otto F., Rutherford, N. Y. Hardystonite from Franklin Furnace, N. J.: Pectolite from Paterson, N. J.; Thaumasite from West Paterson, N. J. March 11, 1904.. .. ..(2475)

ACCESSIONS BY LOAN TO THE CARNEGIE MUSEUM.

From April 1, 1903, to April 1, 1904.

Alter, Mrs. M. H. (through Mr. C. C. Mellor, Pittsburgh). Old microscope made in Paris by Nachet. March 30, 1904.. .. ..(212)
Few, Mrs. Hattie Ward, 353 Frankstown Ave., Pittsburgh. Brass-mounted lantern formerly property of Andrew Carnegie and carried by him when Division Superintendent of the P. R. R. Oct. 31, 1903..(208)

Huffman, C. J., 916 Federal St., Allegheny, Pa. Flint-lock pistol, formerly property of Capt. Joseph Edwards, British Army (Revolutionary War). Jan. 11, 1904.. .. .. .

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Publication of the Carnegie Museum: Serial No. 36

THE CARNEGIE MUSEUM

PITTSBURGH

ANNUAL REPORT OF THE DIRECTOR

FOR THE

YEAR ENDING MARCH 31, 1905

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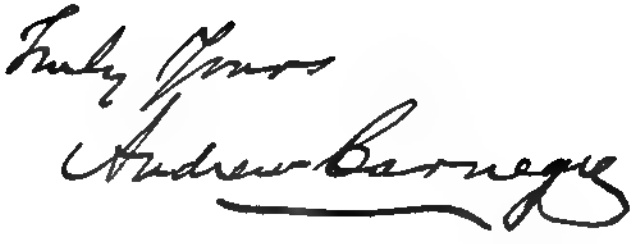

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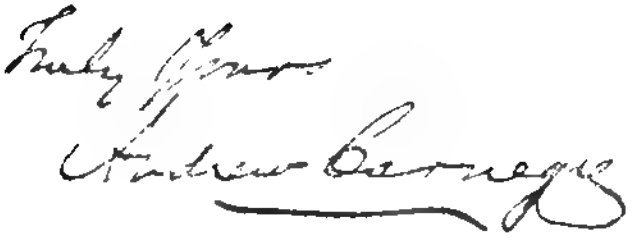

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1905

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1904—1905.

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W. J. Holland, LL.D.

LETTER OF TRANSMITTAL.

MR. C. C. MELLOR,

Chairman of the Committee on the Museum of the Board of Trustees of the Carnegie Institute.

DEAR SIR:—I herewith submit to you, and through you to the Board of Trustees of the Institute, my annual report for the last fiscal year, covering the operations of the Museum during the period from April the 1st, 1904, to March the 31st, 1905.

Included in my report are statements of our receipts and expenditures for various purposes, and a list of the accessions which the Museum has received.

The confidence reposed in me and my associates by yourself and your colleagues in the Board of Trustees is deeply appreciated, and I desire to thank you for the unfailing consideration and kindness which you have shown to us in the prosecution of our at times exceedingly difficult duties, made at the present time more difficult by the changes which are taking place in the buildings of the Institute.

I am,

Very sincerely,

W. J. HOLLAND, *Director.*

Carnegie Museum, March 31, 1905.

ANNUAL REPORT UPON THE CONDITION AND PROGRESS OF THE CARNEGIE MUSEUM IN PITTSBURGH.

Submitted March 31, 1905.

By W. J. Holland, *Director.*

The work accomplished by the Carnegie Museum during the past twelve months compares very favorably in character and amount with the work of previous years, although it has been carried on under circumstances in many respects most disadvantageous, and although there has been constant interruption of our activities in many directions because of the changes which are taking place in the buildings of the Institute. The difficulties which we have encountered and which are unavoidable have been met in a spirit of great cheerfulness by all the members of the staff, because they are incident to preparations for an era of greater development and of progress. In fact we have rejoiced in our discomforts, because every added discomfort only presages the coming of a better day when the institution will be able to take its place among the greatest of its kind in our land, if not in the world. It became necessary in January to close the exhibition halls on the third floor of the Museum. The exhibits contained in the three rooms on that floor were condensed into two rooms. The room occupied on the first floor by the paleontological assistants was surrendered to the Library for the purposes of a newspaper reading room, and the members of the staff who had previously occupied it were transferred to the third floor, together with the collections upon which they were working. The private office of the Director on the second floor was abandoned and its contents transferred to the general office, and the clerical force of the office was transferred to the small room on the first floor

formerly occupied by Professor Hatcher as his study and office. We have been notified that it is the desire of the officials of the Library to take possession as soon as possible of the rooms in the basement at present occupied as laboratories by the paleontologists and zoologists of the staff. In these rooms, as well as in the adjacent corridors, there are at present stored collections amounting in value to more than one hundred thousand dollars and consisting of objects which require the utmost care in handling them so as to prevent loss by breakage. We had hoped, and had been given to understand, that it would not be necessary for us to remove from these apartments until permanent quarters could be provided for us in the new building. It has been arranged with the contractor at the suggestion of Mr. W. N. Frew, the President of the Board of Trustees, that a transfer may be made of the working force in our laboratories and of the collections there stored to that portion of the new building which is intended to be used hereafter as a restaurant, and Messrs. William Miller and Sons have agreed that they will place, at our expense, in this portion of the building and in one or two of the smaller rooms adjoining, temporary floors, will put in a rough terra cotta floor above, and build a tight roof of boards and tarred paper over the space, so as to insure what is contained in that part of the building against damage by rain. I have also taken steps to have gas and water introduced into the room, so as to enable us to go on with our work. While this arrangement is likely to be in many respects highly inconvenient, nevertheless it is a better solution of the problem than it would have been to have erected at considerable expense a building elsewhere and have transported to it all of these valuable collections.

INVENTORY.

I take pleasure in herewith submitting an inventory showing the value of the contents of the Museum at the present time.

PERSONAL PROPERTY OR ASSETS OF THE CARNEGIE MUSEUM, MARCH 31st, 1905.

Collections purchased or made by the Museum, cost.	$156,377.58
Collections donated of which the cost to the donor is known	131,821.44

Exhibition Cases, cost		$ 30,292.93
Furniture, cost		1,063.85
Boxes, Trays, Storage Cases, etc., cost		4,603.20
Library, Books donated, Estimated value	$2590.00	
Books purchased, cost	8285.90	
		10,875.90
Photographs, Paintings and Frames		1,181.55
Photographic Apparatus		351.27
Herbarium Boxes		756.25
Laboratory Fixtures		858.05
Tools		681.27
Publications on hand for sale or exchange		5,900.00
Total		$344,763.29
Collections deposited in the Museum as Loans, Estimated value		40,000.00
Total		$384,763.29
Total value of Collections given in Report, March 31, 1904		321,112.49
Increase in value of Collections during year ending March 31, 1905		63,650.80

VISITORS.

The number of persons visiting the Museum during the past year up until the time when it became necessary for us to close some portions of the Museum showed no appreciable falling off in numbers from former years. The more or less disordered and disarranged condition of the entire building since building operations were actively begun has tended to deter visitors from coming to the Museum, though every day still witnesses the presence of multitudes of those who are interested in the collections which we have. We have been honored by the presence with us of a great many distinguished scientific men during the past year. The Louisiana Purchase Exposition brought to this country a great many men who are eminent in various branches of scientific research, and many of these made the city of Pittsburgh a stopping point on their journeys to and from St. Louis

and visited the Museum. Many of those who called upon us were of the number of those who were delegates to the International Congress of Scientists, which was held at the World's Fair. We have also had the pleasure of welcoming a large number of the most distinguished scientific men of the United States, who have resorted to the Museum not merely for the purpose of becoming acquainted with the work which we are doing, but for the purpose of prosecuting studies and researches which could not well be carried on successfully without access to the scientific material which we have already amassed.

THE STAFF.

Not only the institution, but the cause of science, sustained a severe loss in the death on July 3d, 1904, of Mr. J. B. Hatcher, who for a number of years was the Curator of Paleontology and Osteology in this Museum. No attempt has been as yet made to fill the vacancy. It is exceedingly difficult to find any one in America who possesses the peculiar qualifications which belonged to him. He was undoubtedly the foremost paleontological field collector in the world. The Director has temporarily assumed charge of the work in the Section of Paleontology. With the admirable assistance of the gentlemen, who are employed as Custodians, Assistants, and Collectors, in this section of our activity, work has been carried on very successfully, although the absence of Mr. Hatcher at times is keenly felt.

Mr. C. W. Gilmore, who last year reported as being a member of the Staff in the Section of Paleontology, is employed at the United States National Museum.

Mr. A. C. Silberling, who was employed as a field collector in the Section of Paleontology, is no longer in our service, having left our employment in October, 1904.

The names of those persons who have been connected with the Staff of the Museum during the past year, for the whole or any portion of the time, are given in the appended list:

Dr. W. J. Holland, Director, and Curator of Entomology.
Rev. A. A. Lambing, Honorary Curator of Historical Collections.

Mr. George H. Clapp, Honorary Curator of Conchology.
Magnus Pflaum, Esq., Honorary Curator of Numismatics.
Mr. J. B. Hatcher, Curator of Paleontology and Osteology.
Mr. C. V. Hartman, Curator of Archæology and Ethnology.
Dr. A. E. Ortman, Curator of Invertebrate Zoology.
Mr. Percy E. Raymond, Assistant Curator in charge of Invertebrate Paleontology.
Mr. Douglas Stewart, Assistant in the Office of the Director, Custodian of the Mineralogical Collections, and Accession Officer.
Mr. Otto E. Jennings, Custodian of the Botanical Collections.
Mr. W. E. C. Todd, Custodian in Charge of the Collections of Recent Vertebrates.
Mr. Hugo Kahl, Custodian in the Section of Entomology.
Mr. F. S. Webster, Chief Preparator in the Section of Zoology.
Mr. Arthur S. Coggeshall, Chief Preparator in the Section of Paleontology.
Mr. Earl Douglass, Assistant in Research, Field, and Laboratory, in the Section of Paleontology.
Mr. Sidney Prentice, Draughtsman in the Section of Paleontology.
Mr. O. A. Peterson, Field Collector and Preparator of Mammals and Birds, in the Section of Paleontology.
Mr. Theodore A. Mills, Modeler and Sculptor in the Section of Ethnology.
Mr. Louis S. Coggeshall, Assistant Preparator in the Section of Paleontology.
Mr. W. H. Utterback, Field Collector and Assistant Preparator in the Section of Paleontology.
Mr. A. C. Silberling, Assistant Preparator in the Section of Paleontology.
Mr. A. W. Van Kirk, Assistant Preparator in the Section of Paleontology.
Mr. J. L. Lockwood, Assistant Preparator in the Section of Zoology.
Mr. Gustav A. Link, Assistant Preparator in the Section of Zoölogy.
Mr. Wilson Banks, Modeler.
Mr. Henry Klages, Assistant in the Section of Entomology.

Mr. Louis H. Townsend, Assistant in the Taxidermic Laboratory, Section of Zoology.
Mr. Sarafino Agostini, Assistant in the Section of Paleontology.
Mr. J. A. Munsen, Assistant in the Section of Archæology and Ethnology.
Mr. D. C. Hughes, Assistant in Section of Archæology and Ethnology.
Miss Grace Kinzer, Assistant in the Section of Botany.
Miss M. J. Stribling, Stenographer.
Mrs. Elizabeth Courtney, Stenographer.
Mr. R. E. Powell, Messenger.

The salaries of the gentlemen employed in the Section of Paleontology are provided from the fund given by Mr. Carnegie for paleontological research.

In addition to the persons mentioned as belonging to the Staff, Messrs. Serafino Agostini, Emil Poli, and Manno Fabri were employed until December in working upon the reproduction of Diplodocus. Their salaries were provided for by a special fund given by Mr. Carnegie.

The Director has granted permission to Mr. Percy E. Raymond to repair to Yale University for the purpose of taking charge of the instruction of classes in invertebrate paleontology at that institution during the spring term of the University. The Director has also granted permission to Mr. O. E. Jennings to take charge of the instruction in botany at the summer school of the Ohio State University, at Cedar Point, Sandusky, during the months of June and July. Requests for the assistance of the younger members of our staff in connection with the work of these two universities evidences appreciation of their worth, which is gratifying.

The relations sustained by the members of the Staff during the year to the Director have been marked by cordiality, and I take the present occasion to express my entire satisfaction with the work of the gentlemen over whose labors I am called to exercise supervision.

SCIENTIFIC RESEARCH.

During the past year explorations were made by the gentlemen belonging to the Section of Paleonthology in New York,

Canada, Nebraska, Wyoming, and Montana. In the Section of Archaeology Mr. C. V. Hartman has been engaged in working up the results of his explorations in Costa Rica. Dr. Arnold E. Ortmann has been working industriously upon the biological survey of western Pennsylvania with especial reference to the Crustacea and Mollusca. Mr. Otto E. Jennings has been studying the flora of Western Pennsylvania and has made extensive collections throughout the western half of the Commonwealth and has added very largely to our knowledge of the distribution of the plants of the region. Mr. Hugo Kahl and his associate, Mr. Henry Klages, have made extensive collections of the microlepidoptera of Western Pennsylvania, a group of insects heretofore almost entirely neglected, and their labors promise to add very largely to our knowledge of a difficult and highly important subject. A great deal of work has been done in classifying, arranging, and studying collections made in former years in the various departments of the Museum, and upon the researches carried on in the laboratory have been based a number of important papers, some of which have been published during the past year, others of which are in the press, and still others in process of preparation. The amount of original research carried on by the officers of the Museum during the past year has been very considerable, and the results are such as to establish the reputation of the institution as one of the foremost of its kind in the field of investigation.

SECTION OF VERTEBRATE ZOOLOGY.

W. J. HOLLAND, Director (in charge).
W. E. C. TODD, Custodian.
FREDERICK S. WEBSTER, Chief Preparator.
J. L. LOCKWOOD, Assistant Preparator.
GUSTAV A. LINK, Assistant Preparator.
LOUIS H. TOWNSEND, Assistant.

MAMMALS.

From the Zoological Gardens in Highland Park we have received a number of specimens in excellent condition which have been skinned and prepared for mounting. A few specimens from miscellaneous sources have been also added to the collection of

mammals. A very large number of the mammals secured in former years have been mounted and prepared for exhibition. On January the 10th Mr. William T. Hornaday published a description of a new species of bear to which he gave the name *Ursus kermodei*. His description was based upon four flat skins coming from the region traversed by the Nass and Skeena Rivers in British Columbia. It happened that on the very day his paper was published Mr. Hornaday paid a visit to the Carnegie Museum, and he there observed that we had in our possession a specimen of the bear which he had just described, which has long stood in our cases labeled as an "albino black bear." Careful examination of the specimen, which is beautifully mounted and in excellent preservation, proves that our institution is in possession of the only mounted specimen of this interesting mammal which is found in any of the museums of the world. An account of the bear from the pen of the Director of the Museum has been published in the Popular Science Monthly, and another article will shortly be published in the pages of the Century Magazine.

BIRDS.

The collection of birds belonging to the Museum at the present time numbers about 23,600 specimens. Of these birds 3,373 specimens are birds which have been taken within the limits of the Commonwealth of Pennsylvania, 1683 having been secured by gentlemen connected with the staff of the Museum during the nine years of its existence. Our collection of birds, even of the birds of Pennsylvania, is exceedingly incomplete, many species known to occur within the limits of the Commonwealth not being represented by a single specimen known to have been collected within the State. It has been a matter of profound regret and cause for just indignation that Joseph Kalbfus, the Secretary of the Game Commission of Pennsylvania, saw fit last July to present to that body a report filled to repletion with willful misrepresentations, in which he, among other things, charged the entire body of scientific men who compose the official staff of the Museum with having "an utter disregard of the laws of the state for the protection of birds." He published to the world the preposterous statement that dur-

ing a few months in the summer of the year 1900 two members of the staff of the Museum had killed forty thousand birds at Presque Isle. This tale, worthy of the inventive powers of a Baron Münchausen, which he submitted to his superiors, without any intimation to the members of the staff of the Museum that it was his intention to do so, led the Game Commission to refuse to all scientific men within the State permission to collect mammals, birds, and their nests and eggs within the limits of the State. The Trustees of the Institute demanded a formal investigation of the charges of the Secretary of the Game Commission, and at last, very tardily, after repeated and most persistent efforts to secure a hearing, an opportunity was given in Pittsburgh, on December the 15th, in the office of Mr. William M. Kennedy, the President of the Game Commission of the State, to meet and refute the calumnies of the Secretary. At this hearing the Secretary failed entirely to substantiate any of his statements. The Board of Trustees then, under date of February the 3d, adopted a series of resolutions demanding of the Game Commission a finding in accordance with the facts and not in accordance with the report of their Secretary. On the 16th of February the Game Commission adopted a resolution stating that they had "come to the conclusion that the authorities of the Carnegie Institute have not wilfully violated the laws of this State and that the number of birds said by their representatives to be in their possession is not in excess of that required for scientific purposes." This retraction was unfortunately not accompanied by steps which would allow the institution to continue its scientific work. It is to bé sincerely wished that the laws of the Commonwealth may be so amended as to allow such institutions as the Carnegie Institute of Pittsburgh, the Academy of Natural Sciences in Philadelphia, and kindred learned associations, to carry on their work without being exposed to petty and annoying vexations due to the meddlesome interference of incompetent subordinates, who do not appreciate the nature and purposes of scientific work. The issuing of licenses to take birds for scientific purposes should be placed in the hands of the State Zoölogist, as in many other Commonwealths.

The work of the Custodian of Ornithology, as a result of the

blundering and untruthful activity of the Secretary of the Game Commission, has been confined to arranging, cataloguing, and studying the collections which we possess. The biological survey of Western Pennsylvania, so far as its avifauna is concerned has been brought to an end. The birds of the Pacific coast and Mexico purchased by us from A. W. Anthony have all been unpacked and arranged to the number of ten thousand specimens.

The first of a series of papers upon the birds of Western Pennsylvania, from the pen of Mr. W. E. C. Todd, based upon the collections and observations made at Presque Isle and Erie in 1900, has been published, and has received flattering recognition from ornithologists.

REPTILES AND BATRACHIANS.

A few specimens representing these orders have been collected during the year, but no careful and elaborate study either of the collections already made or of the species which are found in our region has been carried on during the past year. No member of the staff possesses the knowledge which is requisite to take up this field of investigation as should be done.

FISHES.

Some small additions have been made to our collections of fishes, principally from South America. Several of the larger species have been mounted and prepared for exhibition, in the Department of Preparation, but our work in this particular field has not been of a character heretofore which leads us to point to it with feelings of particular pride or interest.

SECTION OF INVERTEBRATE ZOOLOGY.

Dr. Arnold E. Ortmann, Curator.
George H. Clapp, Honorary Curator of Conchology.

In this Section the Curator has devoted much of his time to the cataloguing and arranging of the collections in our possession. Among the collections thus treated are the collection of deep sea shells belonging to the *Porcupine* and *Valorous* Expe-

ditions, which were purchased from H. B. Preston, of London, and the Gastropoda and Pelecypoda of the Hartman collection. Of the Gastropoda 4754 species have been catalogued since the work was begun by Dr. Ortmann, and about eighteen hundred species of Pelecypoda have been catalogued. There remain a great many species in both groups belonging to the Museum which have not yet been catalogued. The other groups of invertebrates have been increased by new accessions, among which may be mentioned a collection of Crustacea purchased from the Marine Laboratory at Woods Holl, and an extensive collection of the local Crustacean fauna made by the Curator, who reports that the collection of Crustaceans belonging to the Carnegie Museum is now probably the best *local* collection in existence.

During the past year the Curator has worked up two collections of Schizopod Crustaceans entrusted to him by the United States National Museum and the Bureau of Fisheries, from Alaska and from the Hawaiian Islands respectively. By the courtesy of these institutions the Carnegie Museum was permitted to retain a number of duplicate specimens, and thus has secured some rare and interesting species. A preliminary paper upon the Crawfishes of Western Pennsylvania has been prepared and published in the Annals of the Museum, Volume III, p. 387 *et seq.* Dr. Ortmann has also published during the year in the *Geographisches Jahrbuch,* Göttingen, Band XXVI, pp. 447-477, an article under the title "Bericht über die Fortschritte unserer Kenntnis der Verbreitung der Thiere (1901-1903)." During the coming year it is proposed that the careful work of the Curator in this Section shall be continued with special reference to the Crustacea and the Mollusca of Western Pennsylvania and the adjoining portions of the country drained by waters flowing into the upper Valley of the Ohio.

SECTION OF ENTOMOLOGY.

W. J. Holland, Curator.
Hugo Kahl, Custodian.
Henry G. Klages, Assistant Preparator.

A number of accessions to the entomological collections have been made during the year just closing. Among these may

be mentioned a collection of the Lepidoptera of Allegheny county, purchased from Mr. Frank Knechtel, of Swissvale, several collections purchased from Mr. H. Fruhstorfer, of Berlin, collections representing the insect fauna of Western Pennsylvania, made by members of the staff, supplemented by several minor collections purchased from local collectors, containing species not as yet well represented in our local series.

Nearly one hundred thousand insects have been mounted and prepared for classification during the past year. The lack of room and of space in which to place cabinets and arrange the vast material in our possession has prevented us from undertaking systematic work to an extent which is desirable. The time of the Curator has also been so taken up with work in other sections and with purely administrative duties that he has been able to devote very little time to those purely scientific activities to which he would be glad to surrender himself in this field of work were it possible to do so.

Our collections have been resorted to by a number of specialists, and we are repeatedly appealed to for information and assistance in the preparation of scientific papers by entomological authorities in all parts of the world, it being well known that our collections here are rich in types and more particularly in the types of North American Coleoptera and North American and exotic lepidoptera.

A very creditable list of the Hemiptera of Western Pennsylvania was prepared by the Rev. P. Modestus Wirtner, O. S. B., which has been published in the Annals. It is one of the best local lists which has as yet been published in the United States.

Constant requests have come to the Museum for Dr. Ashmead's valuable paper upon the Chalcidoidea, which appeared in the spring of 1904. This important monographic revision of the difficult group of insects with which it deals has attracted widespread attention throughout the scientific world.

Both Mr. Hugo Kahl and Mr. Henry G. Klages, the efficient assistants in this section of work deserve commendation for the industry and zeal which they have displayed during the past year.

SECTION OF BOTANY.

W. J. HOLLAND, Director (in charge).
OTTO E. JENNINGS, Custodian.
MISS GRACE KINZER, Assistant.

Extensive work has been done on the Pennsylvania herbarium during the year. Card maps were devised of the regulation library card-catalogue size, upon which the distribution of the species within the State is being checked by counties as rapidly as ascertained. Fourteen collecting trips were made to different points in the western part of the State outside of Allegheny county, and twenty-seven different counties were visited, embracing the entire western portion of the State as far east as Potter, Huntingdon, and Bedford counties. Collections were made on these trips of over three thousand specimens, of which about twenty-six hundred represent species not before in the herbarium from the particular counties visited. Two trips were made to the Pymatuning Swamp in Crawford county, with a view to the thorough botanical study of this interesting locality, and extensive collections and notes were made along both systematic and ecological lines.

During the year there have been thirty-six accessions made in the Section of Botany, consisting altogether of 6231 specimens. Among the more important collections may be mentioned Professor J. Urban's collection of Porto Rican plants, containing cotypes of many new species described by him; Dr. J. K. Small's Mosses of the United States; Dr. A. J. Grout's North American *Musci Pleurocarpi;* and Professor J. L. Holzinger's *Musci Boreali-Americana;* Professor A. H. Curtiss' plants from the Bahaman and West Indian Islands; and a collection representing the flora of the Selkirk Ranges in British Columbia, purchased from Professor Charles A. Shaw. Professor D. R. Sumstine has continued his work in collecting for the Museum, and has sent in a large number of identified fungi obtained in Western Pennsylvania, among them several type specimens of new species discovered by him. The Fungi of Ohio issued by W. A. Kellerman of the Ohio State University are being received as each fascicle appears. A card index of accessions has been prepared and arranged both numerically and alphabetically. A good dissecting

microscope has been provided for the use of the Custodian. The assistant in the Section, Miss Grace Kinzer, has in a most painstaking manner and with excellent skill, mounted about eight thousand specimens during the year. Approximately ten thousand mounted specimens have been distributed into the general herbarium. A thorough overhauling of the herbarium is well under way, involving the addition of new genus covers, the stamping of the herbarium sheets, and remounting and relabelling where found necessary. There are now in the herbarium approximately thirty-eight thousand species and seventy-five thousand specimens. The Director takes occasion to compliment Mr. O. E. Jennings, the efficient Custodian of the collection, upon the industry and ability, which he has displayed in the oversight of the work entrusted to his care.

SECTION OF MINERALOGY.

W. J. Holland, Director (in charge).
Douglas Stewart, Custodian.

In my last Annual Report I commented upon the fact that our collection of minerals, though excellent as far as it went, was very defective and not by any means complete. Through the magnificent generosity of the founder of the Institute I am able to report that in this section of our activities the entire situation has been revolutionized. In December, 1904, Mr. Carnegie very kindly authorized the purchase of the Jefferis collection of minerals. Mr. W. W. Jefferis of West Chester, Pa., devoted sixty years of his life to the collection of minerals. He was the friend and constant correspondent of Professor George J. Brush, Professor James D. Dana, Professor Charles Upham Shepherd, and many others of the leading collectors and scientific mineralogists of the latter half of the nineteenth century. His collection is particularly rich in beautiful specimens described by the fathers of mineralogy in this country, coming in many cases from classic localities which have in recent years been exhausted. Mr. Jefferis was not only a scientific collector, but he had an eye to perfection and beauty in the specimens which he assembled, and with but one or two exceptions his collection is undoubtedly the finest collection in private hands which has ever been amassed in the

United States. Among the specimens which it contains are quite a number of types and specimens which have been figured in text books and in scientific publications. The acquisition of this exceedingly rich and important collection places this section of the Carnegie Museum in a peculiarly strong position. The collection has just been packed up, and when loaded the boxes containing it filled two large freight cars, which have been brought to Pittsburgh. This collection must of necessity be temporarily stored until sufficient space can be found to enable us to undertake the work of unpacking and of classifying and arranging the specimens for exhibition. With the specimens which we have already secured from many localities, this collection will enable us in the Hall of Mineralogy to make an exceedingly attractive and instructive display. The duplicates in the collection, of which there is a considerable series, will also enable us to make exchanges in time to come with other institutions, which will greatly enrich our collection. These duplicates are many of them quite as valuable and as beautiful as the specimens belonging to the exhibition series.

SECTION OF PALEONTOLOGY.

W. J. HOLLAND, Director (in charge).
PERCY E. RAYMOND, Assistant Curator, in Charge of Invertebrates.
W. S. COGGESHALL, Chief Preparator.
EARL DOUGLASS, Assistant in Research, Field, and Laboratory.
SIDNEY PRENTICE, Draftsman.
O. A. PETERSON, Field Collector and Preparator of Mammals.
LOUIS S. COGGESHALL, Assistant Preparator.
W. H. UTTERBACK, Field Collector and Assistant Preparator.
S. AGOSTINI, Assistant.

The founder of the Institute has during the past year continued to maintain the work in this section of the Museum by means of a special grant of the necessary funds.

As has already been said, the death of Mr. J. B. Hatcher was a sad loss not only to the Museum but to the cause of paleontology. The Director of the Museum fortunately is in possession of much of the information possessed by Professor Hatcher in relation to the fossil fields of the West, and, aided by the skillful and intelligent labors of the gentlemen composing the paleon-

tological staff of the Institute, he has felt justified in pushing forward the work already so brilliantly begun by Professor Hatcher, without immediately taking steps to appoint a successor. While this course entails upon the Director added responsibilities and many cares, nevertheless we are able to report most gratifying progress.

The Bayet collection, purchased last year, has been unpacked and the invertebrate fossils have been in part arranged by Mr. Percy E. Raymond, who is in charge of the invertebrate collections. It was necessary to relabel a considerable number of the specimens owing to the wetting they had received at the time of the fire in the warehouse of Messrs. Haugh & Keenan, through which they passed. Aside from the dampening of the labels they received no injury whatever. The work of cataloguing has been begun and is in progress. The fossil invertebrates of the Bayet collection will fill about one thousand two hundred storage trays, of which, roughly estimated, two hundred will contain Paleozoic fossils, six hundred Mesozoic, three hundred and fifty Tertiary, and fifty Quaternary. About one half of the Paleozoic fossils, including all that were identified upon arrival at the Museum, have been catalogued, requiring two thousand cards. They represent about seventeen hundred species and five thousand specimens. This collection contains a large number of beautifully preserved Wenlock crinoids from Dudley, England; a good collection of Silurian fossils from Gothland; numerous pyritized crinoids and starfishes from Bundenbach, Germany, and a lot of silicified carboniferous fossils from Tournai. The latter material is of especial interest to us for purposes of comparison with a small collection of delicately preserved and silicified fossils collected in the Carboniferous of Montana by Mr. Earl Douglass. The best of the unidentified Paleozoic material in the collection consists of large suite of carboniferous fossils from Visé and the Devonian of Eifel.

From the middle of June until the middle of August Mr. Percy E. Raymond was in the field, collecting mainly in the Lower Ordovician and Lower and middle Devonian of eastern New York and Southern Canada. From the Chazy formation unique material was obtained, much of it new to science. From the lower Trenton of Canada and the Devonian of New York

much finely preserved material was also obtained. The latter collection will not only represent these formations in the exhibition series of the Museum, but will also serve as a basis for future scientific articles. Mr. Raymond has with the permission of the Director been devoting some time to the preparation of an extensive Memoir on the fauna of the Chazy Formation, based upon the collections in the Carnegie Museum and those which Cornell and Yale University have loaned us for study. This memoir will soon be ready for the press, the first part on the Trilobites having already been published early in March.

Owing to the crowded condition of the exhibition rooms no new collections of invertebrate fossils have been placed on exhibition, a large number have, however, been selected and prepared, so that these collections may be installed in the shortest possible time when the new halls are ready for occupancy.

During the spring and summer of 1904 Mr. O. A. Peterson carried on extensive explorations in western Nebraska and eastern Montana, resulting in the acquisition of a great deal of valuable material representing the vertebrate fauna of the Lower and Upper Miocene of the region explored by him. As the result of extensive investigations carried on in the Harrison (Dæmonelix) beds Mr. Peterson was led to believe that he had discovered a tenable solution of the puzzling problems presented by the interesting fossils which are characteristic of these formations. He has published in the Memoirs of the Carnegie Museum a paper giving the results of his observations, which tend to prove that Dæmonelix is attributable to the labors of a burrowing rodent to which he has given the name of *Steneofiber fossor*. He succeeded in recovering some thirteen specimens representing the remains of this curious little animal, and with great skill has succeeded in mounting an entire specimen of the animal, which is now on exhibition in the Carnegie Museum. In addition to these remarkable and interesting observations made by Mr. Peterson, he succeeded in securing a large quantity of material representing various species of the family Oreodontidæ and other mammals, characteristic of the geologic period represented by the formations in which he was laboring. Some of this material is in process of being freed from the matrix, and no doubt will

furnish material for interesting papers which will be published at a later date.

Mr. W. H. Utterback employed the spring and early summer in making extensive explorations of the Judith River beds in Montana. This work was undertaken with a view to completing his labors begun in the same region in the spring of 1903. He was quite successful in obtaining a quantity of material representing the genus Claosaurus. After June the 15th Mr. Utterback undertook the exploration of the Laramie beds in Montana. He was very much hampered in his activity by the excessive drouth which prevailed in the region traversed by him, but in spite of the difficulties which he encountered he was signally successful in discovering two splendid skulls representing the genus Triceratops, one of which has been freed from the matrix, has been mounted, and is now on exhibition in the Museum, and challenges comparison with any other specimen which has ever been secured. In addition to the material representing Triceratops Mr. Utterback was also fortunate in securing from the Laramie beds additional material representing the genus Claosaurus.

Mr. Earl Douglass has been engaged during the past year in rendering services in the laboratory and in prosecuting research work based largely upon material already accumulated by him. Three papers from his pen have been prepared for publication. Mr. Douglass is engaged in working out an elaborate memoir upon the mammalian fauna of the Tertiary deposits in Montana, and it is hoped that this work, which is well in hand, may soon be published. He has also in process of preparation papers relating to the geology of the region, one portion of which, in the nature of preliminary notes, has already appeared in the Annals of the Carnegie Museum, Vol. III.

The work in the laboratory has been zealously prosecuted. The restoration of the skeleton of Diplodocus was finished in November and shipped to the British Museum. It will be installed in the Gallery of Reptiles in the month of April, and will be exposed to public view in May. For the purpose of installing this reproduction the Director, acting on the suggestion of Mr. Carnegie, has repaired to London, where, assisted by Mr. Arthur S. Coggeshall, the work of installation will be accomplished.

In the halls provided in the new additions to the building it is hoped to be able to install a number of the dinosaurs of the western country, for which we have excellent material. It is hoped to set up skeletons of Diplodocus, Brontosaurus, Morosaurus, and should our explorations during the coming months be successful, a skeleton of Triceratops. We have also a large amount of Claosaurus material, and it is believed that we may be able also to effect the restoration of this huge creature. The Hall of Dinosaurs in the new Museum will be one of the most attractive displays of its kind in the country. The mammalian fauna of later geological periods is well represented in our collections, and we are constantly adding to it. A number of skeletons of mammals will be prepared for mounting and exhibition during the coming year under the direction of Mr. Peterson. A magnificent group, representing *Promerycochoerus leidyi* Bettany, was installed in the early summer, and a number of other mammalian skeletons were freed from the matrix and mounted. The work which has been done in this connection has elicited the admiration and surprise of scientific men, and our assemblage of vertebrate fossils is rapidly assuming a commanding position among paleontological collections.

SECTION OF COMPARATIVE ANATOMY AND OSTEOLOGY.

Mr. L. H. Townsend has during the past year macerated and prepared for mounting a considerable number of interesting skeletons. Mr. Webster is completing the mounting of the skeleton of "Old Sorrel," General Stonewall Jackson's horse, the gift of which was mentioned in my last Annual Report.

Owing to the limited space at present at our disposal it is impossible for us to prepare for mounting and exhibition many skeletons which we already possess. With the completion of the new building, however, our laboratory facilities will be so increased as to enable us to prosecute this work to advantage.

SECTION OF ETHNOLOGY AND ARCHAEOLOGY.

C. V. HARTMAN, Curator.
D. C. HUGHES, Assistant.
THEODORE A. MILLS, Modeler and Sculptor.

Mr. C. V. Hartman has devoted his time during the past year to carefully working up the magnificent material which he acquired during his expedition of the year before to Costa Rica. The Velasco and Troyo collections have been unpacked, arranged, and partially catalogued. The collections made by Mr. Hartman himself have also been in part unpacked and catalogued. With the permission of the Director Mr. Hartman spent a month in Philadelphia, New York, and Boston, in consulting the libraries in those cities, in order to obtain information, which he required in order to prepare his report upon the antiquities discovered by him. This work will, when completed, form a companion volume to his previous work "Archaeological Researches in Costa Rica," a publication, that treats mainly of the archaeological features of the Atlantic Coast and the Highlands of the Republic. In his report it is the intention of Mr. Hartman to give not only the principal results of his own field-work in these hitherto almost unexplored regions of Central America but also to supplement them with illustrations and explanatory descriptions of a series of the most important types of the ancient artifacts, selected from the various collections purchased by the Carnegie Museum, in Costa Rica. It was in reference to one of the latter collections, the Velasco collection, that that eminent authority on American Archaeology and Ethnology, the late Professor Frank Hamilton Cushing made the following statement:

"This collection is of superlative importance to science. In the first place it is intrinsically valuable, consisting as it does of jade, jadeite, fine terra-cotta, shell, and gold. In the second place there is no single collection of aboriginal American art works in stone, in any museum in America, or, so far as I am informed, abroad, that can compare with this one as to the number of examples it contains of superbly carved, polished, and finished specimens, that are at the same time of the highest artistic beauty even from our standpoint. So true is this that I venture to say

that no lapidary would undertake to duplicate the stone series alone for less than four times the price, that is charged for this entire treasury of ancient American gems. But, above all, the collection is unique among American collections of its kind thus far gathered in scientific importance of a very definite sort. It abounds in types illustrating not only the origin of many forms of weapon, symbol, and decoration, but also of the part myth and religious concept play in the modification conventionally, of all these things. . . . Were I a man of large means, or of even only moderate means, I would unhesitatingly buy the collection, if only for the sake of having it to study and publish, illustrated, to the world."

Another well known authority in the field of South American archaeology, Professor Max Uhle wrote lately about this same collection: "As the basis for a representative collection of Central American antiquities I consider the Velasco collection of extraordinary importance. It comes from a province of Central America most important from a historical point of view. It seems to me, with my knowledge of the richest European and other Museums, to be unique in its wonderful implements of stone and according to my modest experience, as far as objects of jade and nephrite are concerned, unequaled by any collection in the world. We shall have to inquire more closely into the relations once existing between the tribes of Central and South America in the near future and it would be difficult to find another collection as appropriate as this on which to base the investigation of the connecting links."

We have added to our collection of ethnological specimens a great deal of material obtained from the western States. Among the collections purchased representing the life of the aboriginal inhabitants of North America may be mentioned a large series of specimens representing the life of the Tlingit Indians; a splendidly labeled collection representing the Hopi civilization; a fine collection of Cheyenne relics; an important collection of Mandan accoutrements and implements; a fine series of Nez Perce woven articles, and a superb collection of Klickitat baskets. We are also taking steps to secure a fine collection representing the activities of the Haida and Arapaho Indians. A good collection of specimens from the Congo Free State was secured through

Mr. Walther Karl of Matadi. Very considerable additions representing various other civilizations have been received from time to time from various donors. The kindness of Mr. Wilson King in presenting to our Museum a number of Peruvian antiquities consisting of golden ornaments and specimens of ancient Peruvian pottery is gratefully acknowledged.

Steps are being taken to lift the Egyptian boat presented some years ago by Mr. Carnegie from the shed in which it has been temporarily stored, to the third floor of the new building. This will have to be effected at this time inasmuch as the object is so bulky that it can only be taken to the place where it is to stand before the walls of the new building are erected. It will be temporarily housed on the third floor and remain there until the hall in which it is to stand is completed. This is one of the most ancient wooden structures existing in the world, and possesses peculiar interest on this account.

SECTION OF NUMISMATICS.

MAGNUS PFLAUM, ESQ., Honorary Curator.

The Director desires to express his sincere appreciation of the zeal and energy displayed by Mr. Pflaum in arranging and cataloguing the coins which are in our possession. With the greatest enthusiasm he has labored during the past year at his congenial task, and the result is gratifying. Unfortunately the very cramped quarters in which we are compelled to work, and the disadvantages of the present situation, have made Mr. Pflaum's work more arduous and difficult than it would otherwise have been. During the year our collection of coins has been increased by a number of minor purchases and by the gift of Mrs. William Thaw, Jr., of a splendid collection of United States coins formed by her husband during his lifetime, which with the utmost generosity she has donated to the Museum. This gift fills many gaps which existed in our collection of coins of the United States, and it is hoped that in a very short time it will be approximately complete. While our numismatic collections are not as yet very large, they are nevertheless growing rapidly through the kindness of donors, and we already have amassed an assemblage of coins which is of value and historic interest.

SECTION OF CERAMICS.

W. J. HOLLAND, Director (in charge).

Almost nothing has been done in this field of our activity during the past year. The limitations of space and inadequate financial resources have conspired to make it necessary for us to reserve for a future time the work which it is very desirable should be prosecuted in this department of our activity. A few pieces of interest have been received as gifts, but no systematic effort to collect could be made.

SECTION OF TEXTILES.

W. J. HOLLAND, Director (in charge).

This field of effort is practically in the same condition as the Section of Ceramics. Both space and money have not been at our command during the year to do anything of importance in connection with this field of activity. Only minor accessions have been made, except as the very large accessions representing the textile industries of the Indians of our western country may be said in part to bear upon our work in this section. Exceedingly interesting and valuable textile products made of various substances are enumerated in the Indian collections to which reference has already been made in speaking of the section of Ethnology.

SECTION OF GRAPHIC ARTS.

W. J. HOLLAND, Director (in charge).

Work in this Section has also been at a standstill during the past year. A few accessions, the gift of various individuals, have been made, but there has been no systematic effort to enlarge and complete the collections which were originally begun when the Museum was established.

SECTION OF TRANSPORTATION.

W. J. HOLLAND, Director (in charge).
WILSON BANKS, Modeler.

Mr. Banks during the past year has made a number of models, and Mr. Mills has added to our collection quite a large series of models which belong to this section. These things are

not as yet placed upon exhibition, but will be added to the collection which is now displayed, when we come to occupy quarters in the new building. All the time which Mr. Banks has had at his command, when not engaged in rendering service in connection with the installation and preparation of specimens in other sections of work, is devoted to making reproductions in miniature of transportation devices. The very spirited models in miniature by Mr. Mills are exceedingly attractive, especially to the young.

HISTORICAL COLLECTIONS.

REV. A. A. LAMBING, Honorary Curator.

Quite a number of historical objects having local interest have been secured during the past year, and our collection is slowly growing. In the new building we shall be able to make a creditable display of historical souvenirs. A great many things are offered to us in this connection for sale, but are usually held at prices which do not justify their purchase, wholly fictitious values being attached to them for sentimental reasons. It is to be regretted that those who have in their possession articles of historical significance have not yet in many instances come to realize that it is better that such things should be placed in the custody of a great institution which would permanently care for them than that they should be scattered and left in the hands of individuals who after while cease to regard them and forget their significance and value.

The work of publishing the annals of the old Virginian Courts, which was undertaken by the Museum, has been brought to an end in Part 2 of Volume III of the *Annals*. The publication of these records, as has already been pointed out in previous reports, has been hailed with a great deal of pleasure by antiquarians and students of history, and we have had a considerable demand for copies of this series of publications from historical, geneological, and patriotic societies.

THE LIBRARY OF THE MUSEUM.

During the past year nearly two thousand dollars have been expended in the purchase of books which were required by the members of the staff for the purpose of prosecuting original re-

searches. Our collection of books of reference, which are constantly and urgently needed in the prosecution of scientific researches, is slowly growing, and in the lapse of time, as additions are made from year to year, we hope to build up a library of reference works in the fields of zoölogy and anthropology, which will compare favorably with similar collections elsewhere.

Through exchange of our publications we are receiving the publications of a great many institutions of learning throughout the world. While the sales of our publications made have not been large, nevertheless the additions to our library through our activity in publication are very significant. It should be our aim to supplement the current numbers of the publications of learned societies by the acquisition through purchase of the issues of these journals which have appeared in former years, so that our series of their publications may be completed.

PUBLICATIONS OF THE MUSEUM.

During the past year four numbers of the Annals have gone through the press; Volume I of the Memoirs has been completed, one part of Volume II of the Memoirs has been issued from the press and four other Memoirs are at present going through the press. A list of the various papers published during the past year by the members of the staff of the Museum and gentlemen who have written upon material contained in the Museum is herewith appended.

Clapp, George H.:

A New Omphalina from Alabama (Omphalina pilsbryi. Clapp). The Nautilus, Vol. XVIII., p. 30.

New Forms of Polygyra from Alabama. The Nautilus, Vol. XVIII., p. 85.

Crumrine, Boyd:

Minute or Order Book of the Virginia Court, Held for Ohio County, Virginia, at Black's Cabin (now West Liberty, W. Va.), from January 6, 1777, until September 4, 1780, when its Jurisdiction over Any Part of Pennsylvania Had Ceased, with Introduction and Notes. Annals of the Carnegie Museum, Vol. III., pp. 5-78.

The Records of Deeds for the District of West Augusta, Virginia, for the Court Held at Fort Dunmore (Pittsburgh, Pa.), 1775-1776. Copied consecutively as received. With Introduction and Notes. Annals of the Carnegie Museum, Vol. III., pp. 229-326.

Douglass, Earle:

Source of the Placer Gold in Alder Gulch, Montana. Mines and Minerals, February, 1905, pp. 353-5. 3 Figures.

Some Notes on the Geology of Southwestern Montana. Annals of the Carnegie Museum, Vol. III., pp. 407-428. 1 Plate.

The Tertiary of Montana.

1. *A Monotreme-like Mammal from the Lower White River Beds.*
2. *Leptictidæ of the Lower White River Beds.* Memoirs of the Carnegie Museum, Vol. II., No. 5.

Eastman, Charles R.:

Fossil Avian Remains from Armissan. Memoirs of the Carnegie Museum, Vol. II., No. 3.

Gilmore, C. W.:

Osteology of Baptanodon Marsh. Memoirs of the Carnegie Museum, Vol. II., No. 2.

Hay, O. P.:

On Two Species of Turtles from the Judith River Beds of Montana. Annals of the Carnegie Museum, Vol. III., pp. 178-182. 1 Plate and 2 figures in the text.

Holland, W. J.:

Annual Report of the Director of the Carnegie Museum for the Year Ending March 31, 1904.

Report of the Prize Essay Contest of the Year 1904.

Address Delivered on the Occasion of the One Hundred and Second Commencement of the Salem Academy and College for Women, Salem-Winston, North Carolina, May, 1904.

The Carnegie Institute. Published in the Pittsburgh Electrical Handbook, 1904, pp. 194-199.

Important Papers Relating to the Western Theological Seminary. Published by the Trustees, April, 1904.

Facts About Pittsburgh. Published by the Chamber of Commerce of Pittsburgh, 1904.

Address of Welcome, Delivered at the Annual Meeting of the Medical Society of Pennsylvania, September 27, 1904. The Pennsylvania Medical Journal, Vol. VIII., No. 2, pp. 67-69.

Pittsburgh as an Educational Center. Published in Official Book of Pittsburgh, for Free Distribution at the Universal Exposition, St. Louis, 1904.

The Distribution of Catopsilia Eubule. Entomological News, Vol. XV., p. 4.

Note on Epipyrops Barberiana Dyar. Entomological News, Vol. XV., pp. 344-5.

The Carnegie Museum. In Pennsylvania Historical and Biographical, Vol. I., pp. 209-215. The Century Publishing & Engraving Co., Chicago, 1904.

Reproduction of Diplodocus Carnegii, temporarily assembled in the Main Building of the Western Pennsylvania Exposition Society, June 30th, 1904.

(Length of skeleton from the tip of the nose to the end of the tail, 84 feet.)

The Inland White Bear (Ursus kermodei Hornaday). Popular Science Monthly, Vol. LXVI., p. 481.

Editorial Portions of the Annals and Memoirs of the Carnegie Museum, Vols. II. and III.

Jennings, Otto E.:

Flora of Cedar Point. W. A. Kellerman and O. E. Jennings. Ohio Naturalist, Vol. IV., pp. 186-190. June, 1904.

Ecological Study of Brush Lake. John H. Schaffner, Otto E. Jennings, and Frederick J. Tyler. Proceedings of the Ohio Academy of Sciences, Vol. IV., pp. 151-165.

Note on the Vegetable Tissues in Dæmonelix. See Memoirs of the Carnegie Museum, Vol. II., No. 4.

Ortmann, Arnold E.:

Bericht uber die Fortschritte unserer Kenntnis von der Verbreitung der Tiere (1901-1903). Geographisches Jahrbuch (Göttingen), Band XXVI., pp. 447-477.

The Crawfishes of Western Pennsylvania. Annals of the Carnegie Museum. Vol. III., pp. 387-406.

Peterson, O. A.:

Description of New Rodents and Discussion of the Origin of Dæmonelix. Memoirs of the Carnegie Museum, Vol. II., No. 4.

Raymond, Percy E.:

The Developmental Changes in Some Common Devonian Brachiopods. American Journal of Science, Vol. XVII., pp. 279-300, Plates XII.-XVIII.

The Tropidoleptus Fauna at Canandaigua Lake, New York, with the Ontogeny of Twenty Species. Annals of the Carnegie Museum, Vol. III., pp. 79-177. 8 Plates and numerous illustrations.

The Trilobites of the Chazy Limestone. Annals of the Carnegie Museum, Vol. III., pp. 328-386. 5 Plates and numerous illustrations.

Todd, W. E. Clyde:

The Birds of Erie and Presque Isle, Erie County, Pennsylvania. Annals of the Carnegie Museum, Vol. II., pp. 481-596. 1 Map and 3 Plates.

The Mammal and Bird Fauna of Beaver County, Pennsylvania. Bausman, History of Beaver County, Pa., Vol. II., 1904, pp. 1195-1202.

Wirtner, P. Modestus, O. S. B.:

A Preliminary List of the Hemiptera of Western Pennsylvania. Annals of the Carnegie Museum, Vol. III., pp. 183-232.

CIRCULATING COLLECTIONS.

This Museum was probably the first institution of its kind to put into practical effect the idea of sending out through the schools small collections illustrating the truths of natural science

in various departments. The experiment, begun a number of years ago, has been very successful, and our circulating collections are in constant demand in both public and private schools. We are pleased to observe that the compliment of imitation is being paid us by a number of other museums not only in America, but in the old world, and the attention of the Director of the Museum has been called to a number of publications which have appeared in European countries citing the example of the Carnegie Museum as worthy of imitation, and advocating the employment of this system universally. It is needless to say that we are highly gratified to find that the idea which we have reduced to practice is one which is deemed of value.

PRIZE ESSAY CONTEST.

The Prize Essay Contest of the last year was the most successful contest of its kind which has taken place since the Museum was opened to the public. Seventeen hundred and forty-six pupils in the schools submitted essays in competition. In the city of Philadelphia, at the suggestion of Dr. S. Wier Mitchell, a similar contest has been inaugurated. Those in charge have informed us that they found our methods so perfect, and even the verbiage of our circulars to the schools so thoroughly adapted to their needs that they adopted, *mutatis mutandis,* not only our methods, but our circulars and programmes, using the very words which we have employed. Here again the delicious compliment of imitation has been paid to this museum. Prize Essay Contests such as established with us have come into vogue in a number of museums on both sides of the Atlantic, and our leadership in this phase of educational activity is freely acknowledged.

THE ANDREW CARNEGIE NATURALISTS CLUB.

This has continued to flourish during the past year, and has accomplished a great deal of good among the youth of the community in stimulating an intelligent interest in the various branches of natural science. It is gratifying to know that one young gentleman, who was at one time the President of the Club, has attained the highest honors in his course at the oldest university in America, from which he will graduate in the near future.

OUR DEBT TO THE RAILWAYS.

It would have been impossible for us to have succeeded as we have done in sending parties of explorers and in bringing back from distant parts of the country the splendid collections they have secured had it not been for the coöperation of the gentlemen at the head of the great railway corporations of America, who with unfailing kindness have granted free transportation to the members of our staff and to the collections which they have secured. In this connection we desire to record more especially our obligations to Mr. A. J. Cassatt, Mr. Robert Pitcairn, and Mr. James McCrea of the Pennsylvania Railroad system, to Mr. Oscar G. Murray, President of the Baltimore & Ohio Railroad, to Mr. Marvin Hughitt, President of the Chicago & Northwestern Railway Co., to Mr. E. J. Ripley, President of the Atchison, Topeka & Santa Fe Railway, to Mr. E. H. Harriman, President of the Union Pacific Railway Co., to Mr. A. J. Earling, of the Chicago, Milwaukee & St. Paul Railway, to Mr. James J. Hill, of the Great Northern Railway, to Mr. George B. Harris, President of the Burlington & Quincy R. R., and to Col. James M. Schoonmaker of the Pittsburgh and Lake Erie Railway. All of these gentlemen have with extreme courtesy endeavored to aid us in our efforts to promote scientific knowldge, and our thanks are due them for a multitude of favors rendered to the institution.

FINANCIAL STATEMENT

OF THE

CARNEGIE MUSEUM, PITTSBURGH, PENN'A.

April 1st, 1904—March 31st, 1905.

GENERAL FUND.

RECEIPTS.

1904.		
April 1.	Balance on hand	$ 2,996.26
	Annual Appropriation	49,000.00
1905.		
Mch. 31.	Sundry Refunds	108.41
	Total	$52,104.67

DISBURSEMENTS.

March 31, 1905:—

By Salaries	$25,730.47	
" Labor	251.00	
" Repairs to Exhibition Cases	5.93	
" Repairs to Furniture	1.20	
" Office Supplies, Stationery, etc	259.20	
" Stamps, Telegrams, etc	208.80	
" Expressage, Freight, Drayage, etc	435.51	
" Insurance	225.00	
" Incidentals,	20.50	
" Traveling Expenses and Car Fares	415.06	
" Laboratory Supplies	237.02	
" Packing and Unpacking	804.88	
" Telephone Rental and Messages	206.50	
" Alcohol, Drugs, etc	310.44	
" Prize Essay Contest	734.57	
" Publications	2,849.85	
" Labels	41.45	
" Collecting Material	48.60	
" Photographic Supplies	2.55	
" Storage and Rent	1,754.64	
" Herbarium Supplies	89.85	
" Dues of Museums Association	5.15	
" Exhibition Cases	1,218.54	
" Furniture	63.00	
" Storage Cases, Boxes, Trays, etc	780.13	
" Herbarium Boxes	15.15	
" Photographs	517.60	
" Laboratory Fixtures	4.80	
" Tools	136.60	
" Insect Pins	67.71	
" Picture Frames	23.75	
" Books Purchased	1,945.34	
" Books Binding	165.65	
" Collections Purchased	12,075.11	
		$51,651.55
Balance on hand		$ 453.12

STATEMENT OF THE CONDITION OF THE SPECIAL FUND PROVIDED BY MR. ANDREW CARNEGIE FOR PALEONTOLOGICAL RESEARCH.

DR.

April 1, 1905.

To Balance on Hand April 1, 1904	$ 8,471.54
" Interest on Daily Balances	120.05
" Refunds	406.30
" Contributed by Mr. Carnegie, Jan. 1, 1905	10,000.00
Total	$18,997.89

CR.

April 1, 1905.

By Salaries of Paleontological Staff	$ 7,204.99
" Field Expenses, April 1-Nov. 1, 1904 (Three parties in the field)	1,493.50
" Laboratory Expenses	140.22
" Purchase of Collections of Fossils	845.00
" Traveling Expenses	57.50
" Freight	219.00
" Boxes and Trays	116.00
" Tools	7.25
" Incidentals	53.88
Total	$10,137.34
Balance on hand available to carry on work to Dec. 31, 1905	$ 8,860.55

PUBLICATION FUND.

DR.

April 1, 1904:—	
To Balance on hand	$ 119.12
March 31, 1905:—	
To Cash from Sales	36.48
" Interest on Daily Balances	1.75
" Cash received from General Fund	2,849.85
	$3,007.20

CR.

By Paid New Era Printing Co. for Printing Annals and Memoirs	$2,246.22
" Paid J. C. Bragdon for Engravings	372.96
" " Murdoch, Kerr & Co., Printing Annual Report for 1904	205.89
" " For Photographs and Sundry Illustrations not made by Members of the Staff	24.78
Total	$2,849.85
Balance on hand	157.35

FUND FOR ACQUISITION OF EGYPTIAN ANTIQUITIES.

DR.

To received from Sundry Donors	$2,863.97*

*This amount is on deposit in the Fidelity Title and Trust Co., Pittsburgh.

REPORT OF THE OFFICER IN CHARGE OF THE CATALOGUE OF ACCESSIONS.

APRIL 1, 1905.

DR. W. J. HOLLAND, Director.

DEAR SIR:

Herewith please find a list of the accessions to the Carnegie Museum during the past year. Owing to the fact that a large number of the collections have not yet been unpacked and catalogued it is impossible to give an accurate account of the individual specimens received. The number of permanent accessions received was 274; the Exchanges, 5; the Loans, 4. The accessions to the library have been much larger than the year before on account of the acquisition of the Beecher and Hatcher libraries.

Trusting that the list may be found correct and meet with your entire approval, I am,

Yours respectfully,

DOUGLAS STEWART,
Accession officer.

PERMANENT ACCESSIONS TO THE CARNEGIE MUSEUM.

April 1, 1904, to April 1, 1905.

DONATIONS.

Andrews, Samuel C., Fifth Avenue High School, Pittsburgh. One pottery head found in excavating at corner of Forbes and Ophelia Sts., Pittsburgh. April 13, 1904.. .. ..(2495)

Armstrong, A. D., 3424 Perrysville Ave., Allegheny, Pa. Two spinning wheels. June 13, 1904.. .. ..(2546)

Atkins, J. W., Beaver, Pa. Hooded Merganser *(Lophoaytes cucullatus)*, male, Beaver, Pa. April 2, 1904.. .. ..(2492)

Atkinson, Dr. D. A., Wilkinsburg, Pa. Long-tailed shrew *(Sorex* sp.*)*, Sandy Creek, Pa. June 2, 1904.. .. ..(2541)

Cambarus bartoni, adult, male, collected at Stoneboro, Mercer County, Pa. July 18, 1904.. .. ..(2576)

Five birds from Allegheny County, Pa. (five species). Sept. 9, 1904. .. ..(2611)

Oceola rhombomaculata Fla. Collected by R. B. Hodge. March 20, 1905.. .. ..(2748)

Ayers, E. E., Cameron, Montana. Specimen of opal var. geyserite from Yellowstone Park. April 6, 1904.. .. ..(2488)

Bachtell, W. L., Joplin, Mo. Six specimens of calcite crystals from Joplin, Mo. April 25, 1904.. .. ..(2503)

Barclay, Miss Nannie G., 430 Duquesne Way, Pittsburgh. Thirteen coins, including U. S. quarter of 1796. Sept., 1904.. .. ..(2620)

Biederman, C. R., Reef, Cochise County, Arizona. Two specimens of the coleopterous family Buprestidæ *(Anthaxia flavimana* and *Acmædera* sp.), from Reef, Arizona. Aug., 1904.. .. ..(2589)

One Tineid moth and four specimens of Coleoptera *(Acmædera gemina* Horn, *Anthaxia flavimana* Gory, *Agrillus pulchellus* Bland and *Coptocycla aurichalcea* Fabr.

All specimens from Reef, Arizona. Nov. 14, 1904.. .. ..(2672)

Bigelow, E. M., Highland Ave., Pittsburgh. German Carp from Highland Park Reservoir. April 11, 1904.. .. ..(2515)

Black, Miss B. G., 5546 Hays St., Pittsburgh. Maori dress (man's); two specimens Kauri Gum; one boar's tooth; specimen of nephrite. All from New Zealand. Comb worn by men in Kandy, Ceylon. May 18, 1904.. .. ..(2533)

Bolser, Wm. W., West Bridgewater, Pa. Red-tailed Hawk *(Buteo borealis)*, male, from West Bridgewater. Jan. 20, 1905. . . . . (2706)

Brace, Mat, 40 C St., Washington, D. C. Small lot of insects from Nome and Tanana, Alaska, and Yellowstone Park. March 16, 1905. . (2737)

Burke, George, Schenley Park, Pittsburgh. European goldfinch, male. Sept. 6, 1904. . . . . (2607)

Cane, H., Nelson, British Columbia. Small lot of butterflies. March 16, 1905. . . . . (2735)

Carnegie, Andrew, 2 East 91st St., New York City. The W. W. Jefferis collection of minerals. Jan. 12, 1905. . . . . (2700)

Four boxes of Tertiary fossils purchased from J. C. Edmundoz, Moffitt, Florida. April 20, 1904. . . . . (2498)

Clay containing invertebrate fossils from Louisiana, Mo. (Louisiana Limestone, base of the Kinderhook, Carboniferous.) Purchased from D. K. Greger, Fulton, Mo. Sept. 28, 1904. . . . . (2629)

Nineteen boxes of fossils from Sioux County, Neb. Collected by O. A. Peterson, Carnegie Museum, Pittsburgh. Aug., 1904. . . . . (2590)

Six boxes of invertebrate fossils from Valcour Island, Clinton County, New York (Chazy Limestone). Collected by Percy E. Raymond, Carnegie Museum, Pittsburgh. Sept. 6, 1904. . . . . (2603)

Five boxes of invertebrate fossils from Chazy, Clinton County, New York (Chazy Limestone). Collected by Percy E. Raymond, Carnegie Museum, Pittsburgh. Sept. 6, 1904. . . . . (2604)

Three boxes of invertebrate fossils from Heidelberg Mts., Albany County, New York (Lower Devonian). Collected by Percy E. Raymond, Carnegie Museum, Pittsburgh. Sept. 6, 1904. . . . . (2605)

Five boxes of invertebrate fossils from Richmondville, New York, and vicinity (Hamilton Shales). Collected by Percy E. Raymond, Carnegie Museum, Pittsburgh. Sept. 6, 1904. . . . . (2606)

Eight boxes of invertebrate fossils from Paquette Rapids, Ottawa River, near Waltham, Quebec (Trenton Limestone). Collected by Percy E. Raymond, Carnegie Museum, Pittsburgh. Sept. 13, 1904. . . . . (2614)

One box of invertebrate fossils, Freshwater Mollusca, Laramie (Upper Cretaceous) from Hell Creek, Dawson County, Montana. Collected by A. C. Silberling, Carnegie Museum, Pittsburgh. Oct. 25, 1904. . . . . (2653)

Ten boxes of vertebrate fossils from Montana. Colected by W. H. Utterback, Carnegie Museum, Pittsburgh. Oct. 10, 1904. . . . . (2643)

Jurassic and Laramie invertebrate fossils from Big Pumpkin Creek, Montana, and Powder River, Wyoming. Collected by W. H. Utterback, Carnegie Museum, Pittsburgh. Nov. 16, 1904. . . . . (2674)

Clyde, W. P., 541 Third Ave., Pittsburgh. One specimen of lignite and iron pyrites; two specimens of iron pyrites taken from excavations of addition to Carnegie Institute, Pittsburgh. July 28, 1904. . . (2580)

Fossil specimen of Calamite stem found in Deer Creek, one mile from

Allegheny River, Allegheny County, Pa. July 28, 1904.. .. ..(2581)
Two concretions taken from Blue Rock when excavating for addition to Carnegie Institute, Pittsburgh. Sept. 10, 1904.. .. ..(2628)
Five specimens of pyrite in blue shale taken from excavations for Carnegie Institute addition. July 30, 1904.. .. ..(2587)

Cockerell, Prof. T. D. A., Boulder, Colorado. The coccid *Dachylopius filamentosus* Ckll. var., on twig of orange tree from Natal, South Africa, by Fuller. March 16, 1905.. .. ..(2739)

Collins D. H., Dallas Ave., Pittsburgh, Pa. One centipede; three tarantula; one walking-stick; one scorpion from Cochise County, Arizona (in alc.). Nov. 11, 1904.. .. ..(2670)

Cowan, Dr Frank (bequest of), Greensburg, Pa. Prism used by Dr. Alter in spectrum analysis. March 6, 1905.. .. ..(2724)

Davis, Dr. T. D., Shady Ave., Pittsburgh, Pa. Herbarium specimens (4 species). Collected in Missouri, Autumn, 1904. Dec. 9, 1904..(2686)

Dickson, Robert, 804 Duquesne Way, Pittsburgh, Pa. Prepared larvæ of *Orygia leucostigma.* March 16, 1905.. .. ..(2738)

Dole, John, Nurseries, Schenley Park, Pittsburgh, Pa. Six species Saprophytic fungi. Collected in Schenley Park, Oct., 1904. Oct. 25, 1904. .. ..(2660)

Dunn, Paul, 4723 Liberty Ave., Pittsburgh, Pa. Snake *(Diophis punctatus?),* found Oct., 1904, in Ophelia St., Pittsburgh. Oct 10, 1904 .. ..(2641)

Dwyer, P. M., 6140 Butler St., Pittsburgh, Pa. Herring Gull *(Larus argentatus),* male, Six-mile Island, Sharpsburg, Pa. Feb. 25, 1905.. .. ..(2720)

Edwards, Edward, South 11th and A Sts., Tacoma, Washington. Vampire bat (species?). July 11, 1904.. .. ..(2572)

Frost, Albert, Pittsburgh, Pa. Several specimens of fossil plants taken from excavations for the addition to Carnegie Institute. Nov. 16, 1904. .. ..(2673)

Fulton, Dr. Henry D., 5149 Butler St., Pittsburgh, Pa. Five documents relating to Old Portage Road. March 22, 1905.. .. ..(2758)

Geissinger, Oscar M., 2525 Frazier St., Pittsburgh, Pa. A sphingid moth *(Protoparce celeus)* from Pittsburgh. July 1, 1904.. .. ..(2565)

Gera, Hugo, 4523 Ritchie St., Manayunk, Pa. Small collection of marine Decapod Crustaceans from Sea Isle City, N. J. (Uca, Ovalipes, Emerita). June 8, 1904.. .. ..(2552)
Seven Decapod Crustaceans collected at Atlantic City, N. J., representing four genera and species (Libibia, Cancer, Uca, Ocypode). July 14, 1904.. .. ..(2571)
Two specimens of *Cambarus affinis* (male and female), from the Schuylkill River, Manayunk, Pa. July 22, 1904.. .. ..(2579)
Two species of crayfishes *(Cambarus bartoni, C. affinis)* from West Manayunk, Pa. Sept. 29, 1904.. .. ..(2631)

Goehring, J. M., Swissvale, Pa. Section of Calamite stem. May 6, 1904. . . . . (2526)

Gœldi, Dr. E. A., Musee Gœldi, Para, Brazil. Specimens of a small Crustacean from Rio Tocanbius at Cameta, Brazil *(Acetes americanus* Ortmann.) (Through Dr. A. E. Ortman.) Dec. 28, 1904. . . (2696)

Gorby, L. A., 6016 Rodman St., Pittsburgh, Pa. Collection of Indian stone relics—locality unknown; one iron tomahawk; one Chinese tobaco pipe. July 30, 1904. . . . . (2588)

Old spinning wheel with two flyers; picture contrasting scenes in 1776 and 1876; Septaria found in well 87 feet deep, Randolph, Portage County, Ohio; old knife from Rouen, France; knife made by prisoner in old Allegheny County Jail. Sept. 7, 1904. . . . . (2598)

Graham, W. F., 335 Atwood St., Pittsburgh, Pa. Collection of Unio shells. Sept. 14, 1904. . . . . (2616)

Grazier, Mrs. Clark, Huntingdon Furnace, Pa. Flying squirrel *(Sciuropserus volans)*, male. Dec. 6, 1904. . . . . (2685)

Griffin, F. A., Columbia National Bank, Pittsburgh, Pa. Sphalerite from Joplin, Mo. April 27, 1904. . . . . (2512)

Hamilton Music Co., 531 Wood St., Pittsburgh, Pa. Florida gopher snake. Nov. 25, 1904. . . . . (2683)

Hamilton, Dr. Wm. R., Pittsburgh, Pa. *Callitriche austinii* Eng., collected in Pittsburgh. June 16, 1904. . . . . (2559)

Hardy, George, Carnegie, Pa. Natural coke found near Yaqui River, District of Hermosillo-Sonora, Mexico. Sept. 15, 1904. . . . . (2618)

Hartman, Carl, Austin, Texas. Specimens of *Epipyrops barberiana* with cocoon and pupæ from Austin, Texas. March 16, 1905. . . . . (2736)

Hartwell, Arthur, Westinghouse Electric & Mfg. Co., Pittsburgh. Tooth of rodent found on bank of Little Miami River, near Fort Ancient, Ohio. Oct. 4, 1904. . . . . (2640)

Hays, Miss Virginia C., 600 S. Highland Ave., Pittsburgh, Pa. Two carved Japanese bamboo vases; two carved Chinese agalmatolite ornaments; piece of carved olive wood; piece of carved soapstone; specimen of Chinese woven paper; pair of iron shoes, and nails from Jerusalem. April 26, 1904. . . . . (2505)

Four cups and two saucers partially fused, and three wrenches fused together by the Pittsburgh fire of 1845. April 26, 1904. . . . . (2506)

Seven specimens of gypsum, var. oulopholites, from Mammoth Cave, Ky.; lot of unlabeled mineralogical specimens. April 26, 1904. . (2507)

Fifteen arrowheads, fourteen fragments of pottery, broken hammerstone. April 26, 1904. . . . . (2508)

Small collection of shells. April 26, 1904. . . . . (2509)

Small collection of fossil plants and invertebrates. April 26, 1904. . . . . (2510)

Small collection of minerals. April 26, 1904. . . . . (2511)

Heeren, Walter F., Penn Ave., Pittsburgh. Fifty-eight coins—copper, nickel and silver. Sept. 29, 1904. . . . . (2638)

Heeren, Wm., Penn Ave., Pittsburgh. Talc pseudomorph after Stauralite 25 spec., from Martinsville, Pa. Jan. 13, 1905.. .. ..(2701)

Hemphill, George E., Douglass, Arizona. Albino red squirrel from Virginia. Nov. 23, 1904.. .. ..(2682)

Hewett, Foster, Pittsburgh Testing Laboratory, Pittsburgh. Eight mineral specimens. Feb. 8, 1905.. .. ..(2713)

Highland Park Zoölogical Garden, Pittsburgh. Antelope, female. April 5, 1904.. .. ..(2514)

Red kangaroo, female, and a young male, the latter an alcoholic specimen. July 2, 1904.. .. ..(2566)

Red kangaroo, young male (alcoholic specimen). July 5, 1904..(2567)

Zebra colt. Oct. 22, 1904.... .. ..(2652)

Striped hyena, male. Jan. 23, 1905.. .. ..(2708)

Moose *(Alce americanus)*, female. Feb. 4, 1905.. .. ..(2712)

Crowned pigeon, male. Feb. 8, 1905.. .. ..(2715)

Hillman, Miss Irma, Craig St., Pittsburgh. A specimen of the Cecropia-moth *(Attacus Cecropia)*, from Pittsburgh. July 15, 1904.. ..(2574)

Holmes, Miss K. R., 552 East St., Allegheny, Pa. Fifty-eight specimens of flowering plants and mosses, collected in Westmoreland County, Pa. Jan. 23, 1905.. .. ..(2709)

Kelly, F. E., Bellefield Ave., Pittsburgh. Five crayfishes *(Cambarus diogenes*, 3 male, 2 female), collected in April at Schenley Farm, Pittsburgh. April 19, 1904.. .. ..(2499)

Two specimens of *Cambarus bartoni*, and six specimens of *C. monongalensis*, collected in October at Thompson's Run, near Kennywood, Pa. Nov. 9, 1904.. .. ..(2666)

King, Hon. Wilson, Edgbaston, Birmingham, England. Seven gold plates and two gold ornaments from Peru. Feb. 8, 1905.. .. ..(2714)

Kiskadden, Mrs. W. J., West Etna, Pa. Boa constrictor. March 8, 1905.. .. ..(2728)

Lester, Frederic A., 137 Corcoran Bldg., Washington, D. C. Fourteen specimens of concretions from Eckington, Washington, D. C. April 20, 1904.. .. ..(2516)

One concretion; one specimen of invertebrate fossil? July 9, 1904. (Through F. S. Webster).. .. ..(2569)

One specimen Cape Diamond from Cape Diamond, Lake George. Dec. 30, 1904. (Through F. S. Webster).. .. ..(2697)

Lewis, J. L., 136 Craig St., Pittsburgh. Collection of gems, cut and uncut. April 30, 1904.. .. ..(2515)

Lonergan, Philip, 1107 Arrott Bldg., Pittsburgh. Large specimen of iron pyrites containing gold, from Mancos Mines, Colorado. Dec. 10, 1904. .. ..(2688)

Lowry, Lee, Oakdale, Pa. Three pieces petrified wood from Oakdale, Pa. March 20, 1904.. .. ..(2750)

Lucock, Frank, Peach Springs, Arizona. Five lepidoptera, *Hesperidæ*, from Peach Springs, Arizona. March 16, 1904.. .. ..(2734)

Lutton, Benjamin, 780 Leamington Ave., Pittsburgh. Fossil cast of stem of lepidodendron. May 28, 1904. . . . . (2540)

Marlatt, Rev. Joseph P., 265 Main St., Pittsburgh. Fir bark from Washington, 53 miles from Seattle, near Snoqualine Falls. Sept. 8, 1904. . . . . (2608)

Medsger, Prof. O. P., Arlington, N. J. Seven herbarium specimens collected in Somerset County, Pa; thirteen herbarium specimens collected in Westmoreland County, Pa. Dec. 9, 1904. . . . . (2687)

Mercer, Eccles B., 2822 Perrysville Ave., Allegheny, Pa. Two gold dollars, Louisiana Purchase Exposition, 1903; one gold dollar, Lewis-Clark Exposition, 1904; California gold half-dollar, 1857; California gold quarter dollar, 1853. Oct. 27, 1904. . . . . (2659)

Moore, Clarence B., 1321 Locust St., Philadelphia, Pa. Collection of archæological specimens from west coast of Florida. May 4, 1904. . (2523)

Morrow, Eustace S., City Hall, Pittsburgh. Two photographs of the ruins of Allegheny County Court House, destroyed by fire May 7, 1882. Oct. 31, 1904. . . . . (2662)

McClintock, Norman, Amberson Ave., Pittsburgh. Wilson's Thrush *(Hylochichla fuscescens)*, male, Pittsburgh. May 10, 1904. . . . . (2529)

McElroy, Samuel, 5637 Hays St., Pittsburgh. Large slug from Pittsburgh. Sept. 8, 1904. . . . . (2609)

Orth, George S, Pittsburgh, Pa. American Bittern, male. Dec. 28, 1904. . . . . (2693)

Packer, Rebecca J., 5518 Center Ave., Pittsburgh. One dollar note, Mechanics Bank of Memphis, Tenn. July 21, 1904. . . . . (2577)

Passavant, D. L., Zelienople, Pa. Herbarium specimens from Western Pennsylvania. April 25, 1904. . . . . (2497)

Patterson, C. S., 211 Fourth Ave., Braddock, Pa. Skull of skunk *(Mephitis putida)*. March 25, 1905. . . . . (2759)

Pflaum, Raymond, Craft Ave., Pittsburgh. Plants (botanical specimens) collected at Guyasuta, Pa. June 3, 1904. . . . . (2543)

Crucibellum vulgare collected at Craft Ave., Pittsburgh. June 22, 1904. . . . . (2558)

Unio shells from Connoquenessing River, at Harmony, Butler County, Pa. July 15, 1904. . . . . (2573)

Nine species Fungi, collected at Harmony, Butler County, Pa. July 27, 1904. . . . . (2584)

Eleven specimens of freshwater Gastropods, collected in Shenango River, Westford, Crawford County, Pa. Sept. 8, 1904. . . . . (2610)

Phillips, John, South Side, Pittsburgh. Grizzly Bear; Wolverine; skull of each. Nov. 11, 1904. . . . . (2671)

Phillips, Oliver O., 1001 Ridge Ave., Allegheny, Pa. Photograph of "Deed of the Six Nations." March 1, 1905. . . . . (2719)

Pinkerton, S. S., 221 Fourth Ave., Pittsburgh. Miscellaneous collection of minerals from Black Hills, Dakota. March 9, 1905. . . . . (2731)

Price, Jesse B., 435 Diamond St., Pittsburgh. Whippoorwill. June 7, 1904. . . . . (2556)

Quinn, John, Houtzdale, Pa. Portions of Crinoid stem found in the Coal Measures of Houtzdale. March 9, 1905. . . . . (2730)

Quinon, Stephen, 1039 E. 169th St., New York City. A token of the Republican Campaign of 1864, with the face of President Lincoln on the obverse and Vice-President Andrew Johnson on the reverse (copper). Oct. 26, 1904. . . . . (2654)

Read, Capt. J. C., 919 Maryland Ave., Pittsburgh. Maps of Phillipine Islands (Govt. Blue Prints). May 13, 1904. . . . . (2530)

Reed, Chas. H., 525 Third Ave., Pittsburgh. Thirty specimens of Bruchus lentis (Lentil weevil) from lentils imported from Egypt. Aug. 25, 1904. . . . . (2591)

Richardson, C. J., Carnegie Museum, Pittsburgh. Concretion containing fossil remains. Sept. 7, 1904. . . . . (2600)

Sample, Mary J. R., 753 Penn Ave., Wilkinsburg, Pa. Macaw. Sept. 27, 1904. . . . . (2627)

Sanders, J. G., Ohio State University, Columbus, Ohio. Collection of scale insects. June 16, 1904. . . . . (2547)

Scott, Thomas, Westinghouse Bldg., Pittsburgh. Filipino coins (7 specimens). Feb. 13, 1905. . . . . (2718)

Scully, Mrs. W. J., 904 Elizabeth Ave., Charlotte, N. C. A larva of *Lagoa crispata?*. March 16, 1905. . . . . (2746)

Shafer, John A., New York Botanical Garden, Bronx Park, New York City. Forty-two sheets of herbarium specimens collected in various localities by different collectors. Nov. 23, 1904. . . . . (2684)

Smith, H. H., Wetumpka, Alabama. Tree toad, collected at Jackson, Alabama. Jan. 15, 1905. . . . . (2707)

Sorg, C. F., 3349 Boquet St., Pittsburgh. Dessicated orange from Florida, collected in 1876. April 22, 1904. . . . . (2500)

Sumstine, D. R., Kittanning, Pa. One box of fungi, collected in Western Pennsylvania. Oct. 24, 1904. . . . . (2661)

Fourteen eggs of snake (species unknown) found in sand. March 25, 1905. . . . . (2760)

Thaw, Mrs. Wm., Jr., Lincoln Avè., Allegheny, Pa. Collection of coins. Feb. 10, 1905. . . . . (2716)

Thon, Dr. Karl, Karlsplatz 21, Prague 11, Bohemia, Austria. Several freshwater Crustaceans from swamps "Zderanokjerero" in southern Hercegovina, Balkan Peninsula. Sept. 29, 1904. . . . . (2630)

United States National Museum, Washington, D. C. Two species of Schizopod Crustaceans from Hawaii and Alaska *Gnathophausia longispina* S. O. Sars, male and female; *Holmesiella anomala* Ortm. *Cotype,* female. Oct. 27, 1904. . . . . (2655)

Walker, Dr. R. L., Carnegie, Pa. Carborundum crystals; lump of coal conglomerate from mine near Carnegie, Pa. Oct. 14, 1904. . . (2647)

Wiley, R. T., Elizabeth, Pa. Photograph from the original by Reeder of John Holcroft—"Tom the Tinker"—of "Whiskey Rebellion" fame. Jan. 9, 1905.....(2698)

Williams, Arthur, Secretary Denver Chamber of Commerce, Denver, Col. A specimen of Colorado Rubber Plant *(Picradenia floribunda utilis)*; sample of crude rubber obtained from plant; two specimens manufactured rubber. April 25, 1904.....(2496)

Williamson, E. B., Bluffton, Ind. Four species of *Cambarus: C. propinquus* from Michigan, and *C. bartoni, C. extraneus, C. putnami* from Kentucky. Nov. 9, 1904.....(2664)

Wilson, Geo. R., Industry, Pa. Florida Gallinule *(Gallinula galeata)*, female, from Industry, Pa. April 30, 1904.....(2519)

Sora Rail *(Porzana carolina)*, male, Industry, Pa. Nov. 19, 1904.....(2678)

Wise, Roy, Farmers Bank Bldg, Pittsburgh. Great Horned Owl *(Asio magellanicus virginianus)*, female, Carmen, Ohio. Jan. 18, 1905.....(2704)

Zuver, Newton C., Allegheny St., Pittsburgh. Concretion from McKeesport, Pa. April 16, 1904.....(2489)

Fifteen specimens of calcite from end of Second Ave., Pittsburgh. April 7, 1904.....(2490)

GIFTS, COLLECTIONS, CONSTRUCTIONS, ETC., MADE BY THE STAFF.

Clapp, George H., 325 Water St., Pittsburgh. Insects from Cuba, Jamaica and Alabama (100 specimens), mostly species of the dipterous genus *Phora,* reared from dead shells collected at Cojimar, near Havana, Cuba. May 12, 1904.....(2532)

Twenty specimens of *Phora* sp. (Diptera), reared from decaying shell, *"Glandina truncata,"* collected at Mountain Creek (between Wetumpka and Calera), Alabama. Oct. 3, 1904.....(2639)

Nine specimens of Camarotocechia from Meramec Highlands, St. Louis County, Mo. Nov. 9, 1904.....(2667)

Medal made from malleable nickel. Nov. 8, 1904.....(2668)

A collection of insects from Kennebunkport, Maine, collected from July to September. Nov. 9, 1904.....(2669)

A moth with its cocoon and pupa, from Kennebunkport, Maine. March 16, 1905.....(2740)

Douglass, Earl, Carnegie Museum, Pittsburgh. One specimen of bornite; two specimens of enargite; one specimen of "Country Rock" from Gagnon Mine, near Butte City, Montana. April 7, 1904.....(2491)

Hartman, Prof. C. V., Carnegie Museum, Pittsburgh. Four young specimens of Blue Crayfish *(Cambarus monongalensis* n. sp.), collected at Logans Ferry, Plum Twp., Allegheny County, Pa. July 18, 1904.....(2575)

Restoration of Diplodocus Carnegii, based upon skeleton in Carnegie Museum.
By T. A. Mills and Dr. W. J. Holland.

One botanical specimen *(Cantharellus aurantiacus)*, collected at Aspinwall, Pa., July 26, 1904.. .. .. .

Mills, T. A., Carnegie Museum, Pittsburgh. Models made in Museum Laboratory. Figure of Crow Indian. May 6, 1904. . . . . (2525)
Figure of Paiute Indian Squaw. July 14, 1904. . . . . (2570)

Mills, T. A., and Wilson Banks, Carnegie Museum, Pittsburgh. Model of East Indian Elephant Battery. Elephants and figures by T. A. Mills, gun and carriage by W. Banks. (Modeled in Museum Laboratory.) Jan. 17, 1905. . . . . (2702)

Ortmann, Dr. A. E., Carnegie Museum, Pittsburgh. *Cambarus diogenes,* female, collected in Edgewood Ravine, Allegheny County, Pa. April 26, 1904. . . . . (2504)
Cambarus diogenes, two males and six females, all adult (two females with eggs), collected in Lower Edgewood Ravine, Allegheny County, Pa. May 3, 1904. . . . . (2521)
Nineteen specimens of crayfishes (17 *Cambarus dubius,* 1 *C. diogenes,* 1 *C. bartoni),* collected in Edgewood Ravine, Allegheny County, Pa. May 10, 1904. . . . . (2528)
Cambarus dubius, 2 males, 6 females, collected in Gordon's Valley, Edgewood, Pa. May 23, 1904. . . . . (2535)
Kalmia latifolia, collected in Lashell's Hollow, Allegheny County, Pa. *Sedum ternatum,* collected in Lashell's Hollow, Allegheny County, Pa. May 24, 1904. . . . . (2536)
Cambarus bartoni (2 spec.), *C. dubius* (1 spec.), from Thorn's Run and Lashell's Hollow, Moon Twp., Pa. May 25, 1904. . . . . (2537)
Thirty-five crayfish *(Cambarus diogenes, C. bartoni, C. bartoni robustus),* collected in Squaw Run, Aspinwall, Pa. May 28, 1904. . (2539)
Plants collected in Crawford County, Pa.: *Clintonia umbellulata* (Mx) Torr; *Hieracium aurantiacum* L. June 7, 1904. . . . . (2544)
One *Galium* sp. from Bakerstown, Pa., one *Myxomecete* from Pittsburgh, one *Plantago rugelii* sport from Jeannette, Pa. June 29, 1904. . . . . (2557)
Three species of crayfishes *(Cambarus obscurus. C. bartoni, C. diogenes);* one leech, collected in and near Smith Creek, Waynesburg, Pa. May 31, 1904. . . . . (2554)
A specimen of the genus *Gryllotalpa* in larval stage, from swamp at Bakerstown, Allegheny County, Pa. June 22, 1904. . . . . (2555)
Land and freshwater shells, collected in Washington, Westmoreland and Crawford Counties. July 1, 1904. . . . . (2562)
Crayfishes collected in Allegheny, Westmoreland, Beaver, Baker and Crawford Counties. July 1, 1904. . . . . (2563)
Three leeches (2 species) from Loyalhanna River, near Ligonier, Westmoreland County, Pa. July 1, 1904. . . . . (2564)
One live Sculptured turtle *(Chelopus insculptus),* collected at West Winfield, Butler County, Pa. June 20, 1904. . . . . (2568)
Land and freshwater shells, collected in Fayette, Cameron, Potter and McKean Counties, Pa. July 28, 1904. . . . . (2582)
Crustacea (4 species), collected in Allegheny, Westmoreland, Fayette,

Cameron, Potter, McKean and Clarion Counties, Pa., and in Garrett County, Md. July 28, 1904.. .. ..(2583)
Botanical specimens (11 species), collected in Western Pennsylvania. July 28, 1904.. .. ..(2585)
Molluscs and worms, collected in Bedford, Blair, Cambria and Beaver Counties, Pa. Aug. 25, 1904.. .. ..(2593)
Crayfishes and Amphipods, collected in Washington, Somerset, Bedford, Blair, Cambria and Beaver Counties. Aug. 25, 1904.. ..(2594)
Four specimens of flowering plants and seven specimens of fungi from various localities. Aug. 30, 1904.. .. ..(2596)
Cranefly, female (Tipula sp.). Sept. 9, 1904.. .. ..(2612)
Freshwater shells from Delaware River, Neshaming Creek and Potomac River. Sept. 29, 1904.. .. ..(2635)
Freshwater shells (Unionidæ and Gastropods), collected at Connellsville, in Youghiogheny River and in Cheat River, Cheat Haven. Sept. 29, 1904.. .. ..(2636)
Five species of crayfishes, collected in Fayette County, Pa. Sept. 29, 1904.. .. ..(2637)
Lizard, collected at Cherry Run, Morgan County, W. Va. Oct. 10, 1904.. .. ..(2642)
A Phasmid from Cherry Run, Morgan County, W. Va.; Tepulid from Edgewood, Pa. Oct. 11, 1904.. .. ..(2645)
Freshwater shells, collected in Elk Creek and on shore of Lake Erie. Oct. 27, 1904.. .. ..(2657)
Crayfishes collected in Erie, Venango, Westmoreland and Washington Counties. Oct. 27, 1904.. .. ..(2658)
Five *Cambarus monongalensis* Ortm. (Cotypes of species), collected at Edgewood Park, Pa., and three *Cambarus diogenes* Gir., collected at Nine Mile Run, Allegheny County, Pa. Nov. 9, 1904.. .. ..(2665)
Two *Necturus maculatus* from Allegheny River at Sandy Creek, Allegheny County, Pa. Nov. 23 1904.. .. ..(2680)
Crayfishes *(Cambarus obscurus)* and a Unio from Allegheny River at Sandy Creek, Allegheny County, Pa. Nov. 23, 1904.. .. .. ..(2681)
Salamander (alcoholic), collected at Selbysport, Garrett County, Md. Dec. 28, 1904.. .. ..(2694)
Cambarus monongalensis n. spec. (one male, two females), from Gordon's Valley, Edgewood Park (Type locality). Dec. 27, 1904..(2695)
Peterson, O. A., Carnegie Museum, Pittsburgh. (See Andrew Carnegie.)
A miscellaneous collection of insects from Sioux County, Neb., and Converse County, Wyoming. (About 450 specimens, 50 of which are larvæ and nymphs kept in alcohol. Sept. 23, 1904.. .. ..(2622)
Skull of Peccary with lower jaw, found in the Loup Fork formation, Running water, Sioux County, Neb. Sept. 26, 1904.. .. .. ..(2625)
Freshwater shells from Squaw Canon, Sioux County, Neb. Sept. 29, 1904.. .. ..(2633)
Pflaum, Magnus, Esq., Bakewell Bldg., Pittsburgh. One 3-cent piece (silver). April 11, 1904.. .. ..(2494)

Specimen of mica from North Carolina. April 25, 1904.. .. ..(2501)
Spider from Georgian Bay, Canada. Oct. 12, 1904.. .. ..(2646)
Raymond, Percy E., Carnegie Museum. (See Andrew Carnegie).
Silberling, A. C., Melville, Montana. A small collection of mammal and reptile fragments from Fort Union Beds, near Melville, Montana. Sept. 26, 1904.. .. ..(2626)
Stewart, Douglas, Carnegie Museum, Pittsburgh. Silver coin of Emanuel de Rohan, Commander of the Knights of Malta (1790). Oct. 20, 1904. .. ..(2649)
Utterback, W. H., Carnegie Museum, Pittsburgh. (See Andrew Carnegie).
Three bison skulls from Montana. Oct. 10, 1904.. .. ..(2644)

PURCHASED BY TRUSTEES.

Anthony, A. W., 900 Thurman St., Portland, Oregon. The A. W. Anthony collection of birds (about 10,000 specimens). April 29, 1904.. .. ..(2513)
Bachtell, W. L., Joplin, Mo. Two groups of golden calcite crystals from Joplin, Mo. April 25, 1904.. .. ..(2502)
Six specimens of galena and calcite from Joplin, Mo.; one specimen of galena, sphalerite and calcite from Joplin, Mo. May 3, 1904..(2520)
Calcite golden crystal from Joplin, Mo. June 10, 1904.. .. .. ..(2545)
Bacon, Samuel E., Second National Bank, Erie. Six birds from Erie, Pa. June 17, 1904.. .. ..(2551)
Eight birds from Erie, Pa. March 8, 1905.. .. ..(2726)
Baker, C. R., Kingston, Jamaica. Four boxes of lepidoptera and coleoptera from Jamaica. May 4, 1904.. .. ..(2522)
Bayet, Baron de, Brussels, Belgium. One specimen of malachite; one specimen of azurite from Cabriere. June 7, 1904.. .. ..(2542)
Biolley, Prof. P., San Jose, Costa Rica. A collection of Micro-lepidoptera, coleoptera and orthoptera from Costa Rica. March 16, 1905..(2745)
Boyce, Rev. Isaac, Jalapa, Mexico. Head of Mexican idol from Sierra Colorado, near Jalapa, Mexico. Sept. 15, 1904.. .. ..(2617)
Brandegee, Miss Katherine, San Diego, Cal. Collection of Bombycid moths from California. March 16, 1905.. .. ..(2741)
Carriker, M. A., Jr., Limon, Costa Rica. Fourteen mammals from Costa Rica (7 species). June 17, 1904.. .. ..(2549)
117 birds from Costa Rica. June 17, 1904.. .. ..(2550)
Curtiss, A. H., Jacksonville, Florida. Curtiss' West Indian Plants. Series I, 207 specimens from the Bahama Islands, 1903; Series II, 314 specimens from the Isla de Pinos, W. I., 1904. Nov. 4, 1904.. .. ..(2663)
Dorsey, Dr. George A., through. Ethnological collection of Tlingit Indian material.. .. ..(2751)
Ethnological collection of Hopi Indian material.. .. ..(2752)
Ethnological collection of Cheyenne Indian material.. .. ..(2753)

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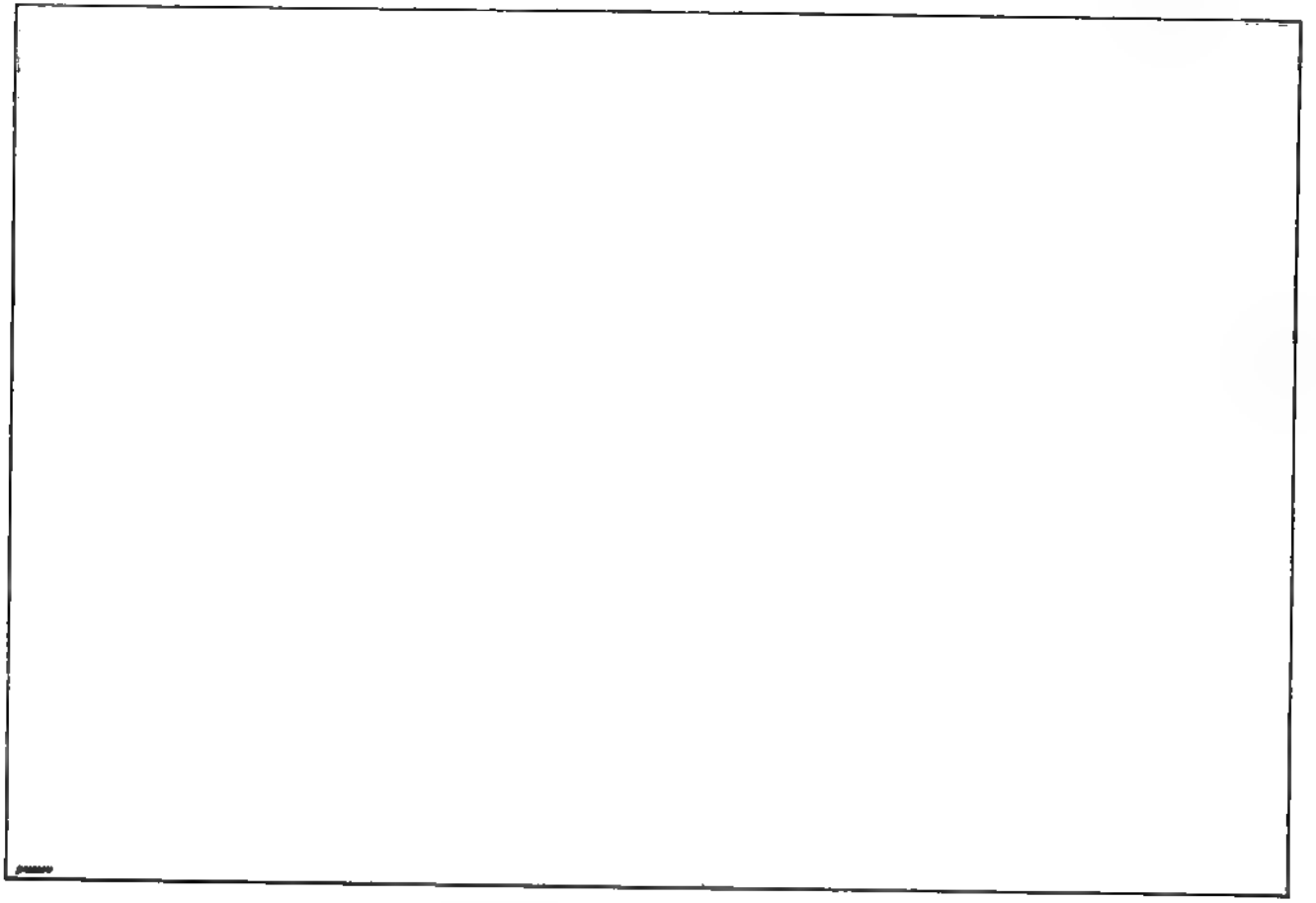

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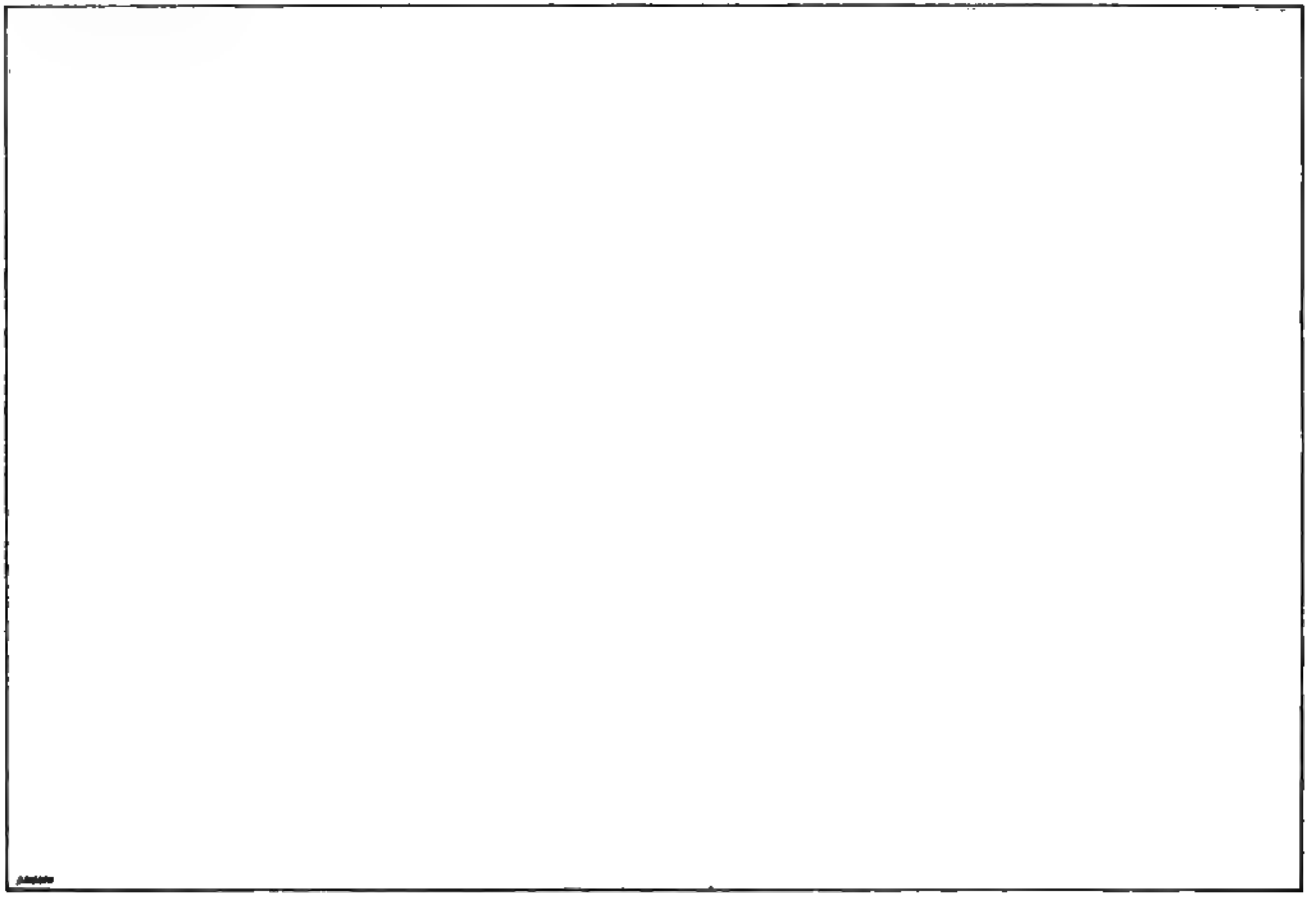

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